Buried History

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Buried History

Buried History is the annual journal of the Australian Institute of Archaeology. It publishes papers and reviews based on the results of research relating to Eastern Mediterranean, Near Eastern and Classical Archaeology and Epigraphy, and the Biblical text.

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Editorial

The publication of *Buried History* is again a little late and we apologise for that. The main reason for the delay is that the rejection rate for papers has left us short of a full issue until now, although the situation has not been as severe as last year. Some of the rejected papers will appear in the future after some revision.

One difficulty that faces us is that, while our contributors, reviewers and readers are predominantly international, the Australian ERA journal ranking system has awarded *Buried History* the lowest ranking; we are not aware of any objective assessment in this matter. The ranking means that Australian academics and researchers are not able to publish with us. There is a review of journal rankings currently underway and we hope that the standard that we have maintained over the last decade will be recognised.

Our Editorial Board has seen a number of recent changes. Dr John Wilson sadly passed away in January. He was Vicar-General of Victoria prior to his retirement a few years ago and his scholarly research was undertaken at Duke and Yale Universities. Over the last decade John was a staunch supporter of the Institute providing valuable advice, practical assistance and great encouragement.

Joining the Editorial Board in 2011 are Kenneth Kitchen, Emeritus Professor of Egyptology, University of Liverpool, and Dr Thomas Davis, who from July will be Professor of Archaeology and Biblical Backgrounds, Southwestern Baptist Theological Seminary, Fort Worth. We hope to appoint a number of additional scholars to the Editorial Board during the year.

The recent death of Professor Emeritus Anson Rainey also saddened us and we have commenced this edition of *Buried History* with a tribute to him. Anson was a scholar of great academic stature having mastery of his fields of research and the ability to offer well supported independent opinions. We will greatly miss his scholarship and friendship. We are indebted to David Bivin, Todd Bolan and Dr John Monson for assistance with illustrations.

Dr Thomas Davis visited Australia as a guest of the Australian Institute of Archaeology in 2010 and gave a number of fascinating lectures and seminars. The paper published here was one of them. Dr. Davis has been the director of the Cyprus American Archaeological Research Institute in Nicosia, Cyprus, since 2003 and has excavated in Cyprus, Jordan, Egypt, and in the United States, where he has substantial archaeological experience in cultural resource management. He is the author of *Shifting Sands: The Rise and Fall of Biblical Archaeology* (Oxford, 2004). Tom earned his Ph.D. at the University of Arizona, under the direction of Professor William G. Dever.

The Institute has a number of unpublished objects and in time we hope to remedy the situation. Emeritus Professor Kenneth Kitchen presents a reading of a rather fine fragment of an Old-South-Arabian inscription in the possession of the Institute. We hope that this exposure will contribute to the knowledge of the pre-Islamic culture of Southern Arabian peninsula.

Merrill Kitchen recently retired as Principal of the Churches of Christ Theological College in Melbourne. She was President of the Melbourne College of Divinity and will be awarded a Fellowship by the MCD in early May. Her paper explores early Jewish thought as demonstrated by synagogue mosaics as a background to the Gospel of Matthew.

Dr Lamia Salem el-Khouri is Associate Professor, Department of Archaeology, Yarmouk University, Jordan. She received her doctorate in 2001 at Mannheim University, Germany for a thesis entitled *The Nabataean Terracotta Figurines.* We are pleased to publish her paper on the stone grinding tools from the site of Barsinia in Northern Jordan.

As always we thank our reviewers and all who have contributed to this issue of *Buried History*.

Christopher J Davey

Anson Frank Rainey 1930 - 2011

It was with deep sadness that we heard about the passing of Professor Anson Rainey on 19th February, 2011, after a brief battle with pancreatic cancer. Anson was associated with the Australian Institute of Archaeology in the late 1970's and in 2002 he gave the Institute's annual lecture, the Petrie Oration, entitled *The Tell el Amarna Letters: 100 Years after Flinders Petrie*; we were in the process of arranging another visit by him to Australia.

Anson was a most significant scholar in West Semitic and neighbouring languages and an authority on the historical geography of Palestine. In spite of his eminence he was always approachable, his presence at conferences added greatly to the discussion and dialogue, and his publications are a constant source of important information and ideas.

When he was in Australia in 2002 we became good friends in spite of political differences. Over a plate of hommus one day he confided that he had recently turned seventy and that he was giving his last ten years a 'real go' at research and publication. This he did and more, and apart from the invaluable results of his studies, his commitment and endeavour were an inspiration for all septuagenarians.

According to the University of Tel Aviv website, Anson Frank Rainey was born 11 January, 1930, in Dallas, Texas. After the death of his father that same year he lived with his maternal grandparents until entering Brown Military Academy, San Diego, California, where in 1946 he completed his secondary education. The military was always important to him, the television series *Band of Brothers* was released while he was in Australia and was compulsory viewing. In 1949 he completed a B.A. in Religious Education at John Brown University, Arkansas.

Anson worked as a social worker for the County Welfare Department, San Bernardino, Calif. before entering the California Baptist Theological Seminary, Covina, Calif., where he took three degrees, M.A. in Old Testament, 1953, B.D. in Biblical Theology, 1954, and M.Th. in Old Testament, 1955. In 1955-1956, he studied at the University of California, Los Angeles, and completed B.A. with Honours in Ancient History with emphasis on the Hellenistic Period.

In September, 1957, he began graduate study at Brandeis University, Waltham, Massachusetts. He received an M.A. in 1959 and began PhD research. A Government of Israel award enabled him to study Hebrew, archaeology, Egyptian, Coptic and Phoenician at the Hebrew University, Jerusalem. After completing his doctoral dissertation on the Social Structure of Ugarit in 1962 he returned to Jerusalem to teach Historical Geography at the American Institute of Holy Land Studies (now the Jerusalem University College). He continued to teach there until recently and is responsible for training a generation of American scholars.

Anson taught in the Ancient Near Eastern Studies Department at the University of Tel Aviv where in 1967 he received tenure as a Senior Lecturer. In 1981 he became Professor of Ancient Near Eastern Cultures and Semitic Linguistics.

He was a practical archaeologist digging at Ramat Rahel (1961), Arad (1963, 64), En-gedi (1964, 65), Metzad Mazal (1965), Kh. Burgata (1966), Lachish (1966-68), Gezer (1967), Arad (1967), Kh. Rabud (1968, 69), Beer-sheba (1969-76); Tel Michal (1977-80); Tel Gerisa (1981-83, 86, 88, 95), Tel Harasim (1997-98).

Anson in 1968 instructing a group of students at Hazor. Photo courtesy David Bivin/LifeintheHolyLand.com

Anson continued to study at the Hebrew University, in Akkadian and Sumerian with Professor Aaron Shafer and in Egyptian with Professors H. J. Polotsky and Sarah Groll. Polotsky's linguistic methodology strongly influenced him and he often referred to this time of study. A sabbatical in 1976-7 was spent at Harvard University where the groundwork was laid for a grammar of the West Semitic language as reflected in the el-Amarna letters. He also conducted a graduate seminar under the aegis of Professor William Moran, the world's leading scholar on the Amarna correspondence at that time.

The Amarna tablets became a significant field of research for Anson. He visited the Cairo museum in 1980-2 to study the tablets there and by 2007 he had worked on all known Amarna tablets after visiting, London, Oxford, New York, Boston, Chicago, Berlin and Moscow. His four-volume *Canaanite in the Amarna tablets: A linguistic analysis of the mixed dialect used by scribes from Canaan*, appeared in 1996. This was prepared during three sabbaticals spent at the University of Pennsylvania where he also taught a seminar in Northwest Semitic inscriptions. All four volumes were published by E. J. Brill Publishers in 1996 in a series entitled *Handbuch der Orientalistik*.

Meanwhile Anson completed a revision of Yohanan Aharoni's *Carta's Atlas of the Biblical Period* that appeared in English as the first part of *The Macmillan Bible Atlas* (1993) and a translation of D. Sivan's *Grammar of Ugaritic, Handbuch der Orientalistik*, Leiden: E. J. Brill, 1997.

From 1984 Anson taught Historical Geography part-time at Bar Ilan University in the Department of Eretz-Israel Studies. He became an Emeritus Professor of the University of Tel Aviv in 1998 and his teaching at Tel Aviv and Ben Gurion University of the Negeb drew to a close in 2001. He then had Fellowships in London, University of California, Los Angeles, Konkuk University in Seoul, Korea, University of Melbourne, Australia.

Anson continued to teach as an adjunct professor at Bar Ilan University and Orot College and at the Jerusalem University College until 2007. During this time he wrote his own historical geography text with Steven Notley, who took responsibility for the Hellenistic and Roman periods. *The Sacred Bridge: Carta's Atlas of the Biblical World,* appeared in 2006 (Jerusalem: Carta Publishers) and contains discussions of epigraphic geographical sources as well as new information derived from field research.

During his career Anson authored more than a dozen volumes, translated nearly that many more, authored in excess of two hundred scholarly articles, wrote numerous reviews, and presented more than eighty conference papers. The Tel Aviv University website has a complete list of publications (http://www.tau.ac.il/humanities/archaeology/directory/dir_anson_rainey.html).

He is survived by one son from his third marriage. He converted to Judaism in 1980 and became an Israeli citizen. Although he was completely committed to Israel and was staunchly right wing, he never seems to have been fully accepted there; the reasons for this are no doubt complex. Anson was very much his own man.

Some of the tasks delegated to him proved interesting. On one occasion he was asked to accompany the two daughters of Sir Charles Marston to Tell ed-Duweir to show them the site of the excavation that their father had funded in the 1930's. He remembered the two rotund women skidding down the side of the Tell on their backsides with much laughter and he also remembered their intense dislike of their autocratic father, although from the biography they later wrote, it is clear that they respected him.

Anson Rainey was one of the great ancient Near Eastern scholars of our time. When he gave the 2002 Petrie Oration at Deakin University in Melbourne, staff from all of Melbourne's other Universities attended, an unprecedented occurrence and a local benchmark for superstardom. He believed it was important to get it 'right', and he had a fearsome reputation with those whom he felt had been sloppy with the evidence. When we attended an Egyptology seminar in Melbourne I remember the visiting international scholar was aghast to see Anson sitting in the front row; although her subject was the Amarna period it turned out she had nothing to worry about.

Anson Rainey was accessible, his support of students was legendary and he always responded helpfully to queries. He had the scholarly confidence that only mastery of all relevant fields and comprehensive research brings, and he had no need to seek support from any particular school of thought. With Anson's passing the field of ancient Near Eastern scholarship has lost a giant; we will be the worse for the absence of his linguistic scholarship and future Near Eastern conferences will be much less enjoyable without his friendly presence and learned contribution.

Christopher J. Davey

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Earthquakes and the Crises of Faith: Social Transformation in Late Antique Cyprus

Thomas W. Davis

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Abstract: The fourth century AD marked a watershed change for the development of Cyprus cultural identity. Transformed by external factors, the Cyprus that emerged by AD 400 is recognizably the forerunner of modern Cyprus. A series of earthquakes during the course of that century caused both the traditional pagan religions and the newly visible and vibrant Christianity to undergo crises of faith. The Cypriot pagan response is to reject the temple cult and turn inward following neo-Platonic teachings before quietly fading away. This is inferred from surviving mosaic floors. The Christian response is expressed in a massive campaign of church construction. The theological framework for this expansion is an understanding of the Providence of God as mercy and judgment inseparably together which forms the foundation for the Cypriot church.

Cyprus' Cultural Identity

The fourth century AD marked a watershed change for the development of Cyprus cultural identity. Transformed by external factors, the Cyprus that emerged by AD 400 is recognizably the forerunner of modern Cyprus. Fernand Braudel's concept of *le long dure,* 'a history in slow motion from which permanent values can be detected' helps us to understand this development (Braudel 1972: 23). These 'permanent values' are almost unobservable in the short term, particularly with the shortened attention span of the twenty-first century, but are critical to understanding the island's cultural identity. Such permanent values include *spatial* features and *temporal* features. Dominating Cyprus' spatial features are its island identity, its strategic location, and its abundant natural resources. Dominating Cyprus' temporal features are the twin pillars of language and religion.

Cyprus is the third largest island in the Mediterranean Sea, measuring approximately 225 kms East/West x 95 kms North/South. Located in the northeast corner of the Mediterranean, approximately 70kms south of Turkey and 120 kms west of Syria, Cyprus is enveloped by Asia Minor and the Levantine Coast. Throughout its history, Cyprus' island identity provided a protective shell around Cyprus' cultural identity. In his recent study of Cypriot prehistory, A. Bernard Knapp emphasizes the fluctuating degree of 'openness or boundedness' on Cyprus (Knapp 2008). As an island, Cyprus forced invasions and colonization attempts to be episodic in nature rather than massive population inundations that would have drowned the indigenous culture under a tsunami of new cultural elements. The millennia long process of cultural negotiation between indigenous populations and newcomers produced acculturation rather than annihilation. Additionally, the local Cypriots had no choice about accommodation; they had no easy escape route before the advent of the industrial Age so they had to come to terms with the latest dominant elite. The fragmentary footprints of this process are found in linguistic and cultural shifts which form signposts in the history of Cyprus.

The fundamentals of self identity and the consequential societal fault lines on Cyprus remain the temporal features (in Braudel's terminology), of language and religion. In the realm of language, Greek speakers first gained cultural ascendancy after the collapse of the Bronze Age World when the Iron Age city kingdoms were established by Greek speaking elites (Iacovou 2006). Other languages used by Cypriots included Phoenician and the as yet untranslated local Bronze Age language using the script labelled by modern scholars as Cypro-Minoan. Against the linguistic rock of Cypriot Greek, other languages would advance and recede such as Latin and French, Arabic, and Italian.

It is the fourth century that witnessed the triumph of Christianity in establishing the baseline of Cyprus cultural identity. In the sixteenth century, the Ottoman conquest brings Turkish and Islam as the opposing pair of temporal values producing modern Cypriot identity. Parenthetically, even today, while most Cypriots are very secular in their daily lives, religious identification remains a major element of communal self-definition. The normal Greek Cypriot, if asked 'Are you a Christian?' will reply, 'Yes, I am not a Turk' and the reverse is true in the Turkish Cypriot Community. Ironically, for all of the nationalistic rhetoric employed by elements in both Greek and Turkish Cypriot Communities, the main facets of Cypriot cultural identity are products of multi-cultural imperialism, not mono-modal nationalism.[1] The Greek language and the Christian faith became permanent fixtures under Late Roman/Early Byzantine rule, and the Turkish language and Islam became firmly rooted under Ottoman rule.

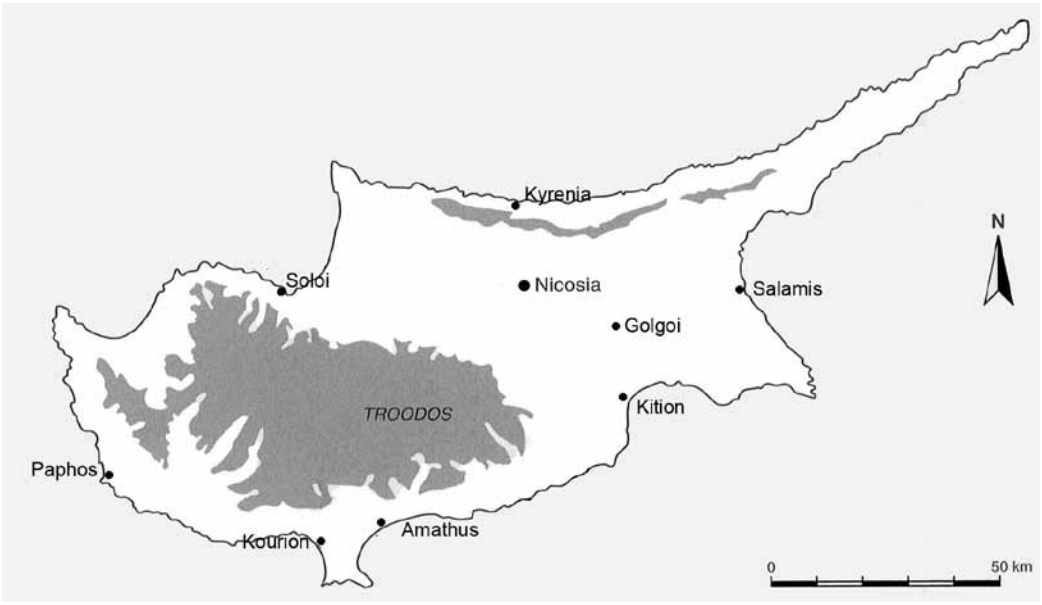

Figure 1: *A map of Cyprus showing the places referred to in this paper*

Cyprus in AD 300

In AD 300, Cyprus was a backwater in the Roman Empire. The ancient sources are largely silent about the island during the Roman period; In Mitford's words, 'In 22 BC Cyprus entered upon more than three centuries of tranquil obscurity' (1980:1295). Inscriptions and coins together record only 48 proconsuls from 22 BC to AD 293, less than 1/6 of the total (Mitford 1980:1299). The proconsul served for only a 1 year term; Mitford points out that this short period of office prevented corruption. In consequence,

Figure 2: *The Gymnasium complex at Salamis, restored by Trajan and Hadrian following the Diaspora revolt in AD 117. Photo Thomas W. Davis*

Figure 3: *The Civic Baths at Kourion. Photo Thomas W. Davis*

Cyprus probably was not seen as an attractive posting for a young roman aristocrat who needed to line his pockets to advance his political career; we know of only 6 governors who go on to become Consuls. The reforms of Diocletian in AD 293 placed Cyprus under the rule of a *praeses* who answered to the *Comes Orientis* in Antioch. Bowersock points out that this arrangement gave 'a privileged position to links with the east, notably Antioch' (Bowersock 2000:10).

Nor did Cyprus attract ambitious military types; there was little scope for military glory. The only major Roman military action on Cyprus before the fourth century is the suppression of the massive revolt of the Jewish Diaspora in AD 116/117. Legions sent from Syria and Pannonia crushed the revolt, and Dio Cassius records more than 240,000 deaths on the island, particularly in Salamis (Dio Cassius LXVIII.32.2-3.) Following the revolt, there is evidence for the redevelopment of Salamis and the restoration of a part of the gymnasium by the Emperor Trajan (Figure 2). A major inscription praising the Emperor Hadrian ('Benefactor of the Salaminians and Saviour of the World') commemorates his important help towards the reconstruction of the city following the revolt (Mitford and Nicolaou 1974). Numerous other imperial dedications are known from Cyprus including two newly discovered Antonine era dedications found in the theater in Paphos (As yet unpublished).

In the year 300 the island may have been politically obscure, but Cyprus was economically integrated into the eastern Roman world. Dimitrios Michaelides has emphasized the importance of Cyprus' economic role and its outsized contribution the island made to the Roman economy (Michaelides 1996). His survey of the economic role of Cyprus highlights the amount of perishable items that Cyprus may have exported, evidence that has not survived in the archaeological record. A recent study by Anthi Kaldelis of Roman trade amphorae found on Cyprus indicates the complex interchange network Cyprus took part in (Kaldelis 2008). Kaldelis' analysis shows that Amathous and Salamis traded heavily with Antioch, Cilicia and the Levant, while Paphos looked strongly west with a high percentage of imports from Italy and Rome itself. This bears out the evidence presented by John Lund (Lund 2006) in his studies of Roman fine wares, of an east/west economic divide in Roman Cyprus between Paphos and the eastern half of the island. The Paphos region was the production center for Cypriot Sigillata fine wear while Eastern Sigillata wares produced in Syria dominate the fine ware sub-assemblages of Salamis and Amathus. In Kaldelis' study, Kourion is an anomaly, involved apparently more in internal trading then directly to the outside. It is possible that this situation arose because Kourion's main industry appears to be the pilgrim trade to the temple of Apollo Hylates. The guest facilities at the Apollo temple are expanded in the second century (Soren 1987) and so are the civic amenities in Kourion itself, such as the baths (Figure 3).

The Cypriot cities in the Roman period lack the usual sense of strong local identity that most cities in the eastern empire evidenced. Cyprus does not have many urban dedications that exalt the city; for the most part, the inscriptions are dedicated to the imperial family on behalf of an individual, a community, or on behalf of the *koinon kyprian*. A sign of the diminished role of urban identity is that the *koinon* was responsible for minting the coins of Cyprus rather than individual cities. Despite this, urban life flourished in the Roman period on Cyprus. There is a great deal of archaeological and inscriptional evidence for extensive building between the first and third centuries AD in the Cypriot urban centers of Paphos, Salamis, Kourion, Amathus and Soloi. New temples, baths and aqueducts, public spaces and markets are constructed. Although Cyprus shared in the empire-wide economic downturn of the late third century, the cities are still in fair shape at the beginning of the fourth century. Vassos Karageoghis (1980:180) estimates that Salamis could have had a population as large as 350,000 although 120,000 [based on the aqueduct size] is a more credible estimate (Hill 1940:42). The lower estimate still makes Salamis the largest urban center in the pre-twentieth century history of Cyprus. It is fair to say that Cyprus circa AD 300 was an urban world, as it would not be again until the twentieth century.

Following the dictates of its island identity, the large urban centers of Cyprus in AD 300 lay on the coast. This coastal orientation is strengthened on Cyprus by the security situation under the *Pax Romana*, and will continue until the seventh century AD. By AD 300, the Roman road system on Cyprus was essentially complete, linking the major urban centers and featuring a peripheral road along the coast of the island. A few milestones indicate road repair after this date including repair work on the south coastal road between Kourion and Paphos (Mitford 1980, Bekker-Nielsen 2004).

Religiously Cyprus maintained its public attachment to the traditional male and female deities of Cyprus with roots far back into prehistory. The Romans knew them as Aphrodite, Zeus and Apollo. Roman coinage depicts the famous Aphrodite sanctuary in Paleopahos and the cult statue of the temple of Zeus in Salamis. It is no surprise that the earliest segment of the Roman road system to be completed is the segment joining the temple of Apollo Hylates at Kourion with the temple of Aphrodite at Paleopaphos (Bekker-Nielsen 2004: 108). All three of the great temples saw extensive rebuilding in the first and second centuries (Figure 4).

Christianity arrived on the island in the first century according to the Acts of the Apostles with the visit of Paul and Barnabas (Acts 13). By AD 300 the Christian faith had attained a stability that enabled it to take advantages of the opportunities offered by the new century. Martyrologies attest to the presence of believers in the second and third century on the island, although no way of estimating the number of Christians is possible. David Soren contended that Kourion was in economic decline in the late third century due to the fall off of the pilgrim trade as Christianity gained adherents in the population (Soren and James 1988).

Shaken and Stirred

The stable world of AD 300 Cyprus was transformed by events in the fourth century that came from outside the island, far outside; actually outside the human world itself. I speak of events that the fourth century Cypriots understood as being under the control of divine beings: the military triumph of Constantine and a series of devastating earthquakes. To the ancients, a military victory between adherents of different gods was understood as the human expression of a divine combat, not just the success of one general over another. When Constantine triumphed under the signs of Christ, his victory was universally understood as the earthly expression of a heavenly victory by the Christian God (Stephenson 2009: 7). When the earth quaked it was a direct result of divine action whether it be the trident of Poseidon Earthshaker or the hand of Jehovah.

Constantine's legalization of Christianity was only effective in the west of the empire. It wasn't until AD 324 and his final triumph over his eastern rival Licinius that this protection spread across the entire empire. Licinius, preparing for his final confrontation with Constantine, gathered more than 350 ships from the eastern Mediterranean provinces. Intriguingly, the apparently demilitarized Cyprus provided 20 of them; it must be pointed out that this is the next smallest contingent, while Egypt and Phoenicia contributed 80 each (Bowersock 2001). The later Cypriot church considered the rule of Licinius to be a time of testing. According to the Byzantine *Menaion* (Calendar of Saints Days) for 2 March, Theodatus, the Bishop of Kyrenia, was cruelly tortured by the orders of Licinius, to silence his preaching, but there is no contemporary evidence of this.

The Council of Nicea in AD 325 gives us our first real historical glimpse of the Cypriot Church. The church is organized enough to have at least three bishops whom they send to the Council, Cyril of Paphos, Gelasius of Salamis and Spyridon of Tremithos. Paphos and Salamis are the two most important cities of the island in 325 but Tremithos is more humble, growing around a road crossing near ancient Golgoi. According to accounts, Spyridon made an impact on his fellow clergymen by his open hearted generosity and kindliness to all he met. He becomes a favorite for later Cypriot Christians and we have some knowledge of his life. He was a shepherd who maintained his original profession while he served as bishop. He had suffered persecution, losing his right eye and being assigned to work in the mines. Spyridon follows the pattern of ecclesiastical authority presented by Claudia Rapp (2005) where visible suffering (persecution or asceticism) leads to spiritual authority. We know nothing of the other signatories except that Cyril from Paphos signed first for the Cypriots implying his primacy. Spyridon is also present at the Council of Sardica in AD 342, where there are 12 Cypriots bishops in attendance,

Figure 4: *Bronze Age walls from the sanctuary of Aphrodite at Kouklia. Photo Thomas W. Davis*

but we only have their names not their dioceses (Hill 1940: 250). Either the Cypriot church was already organized before 325, and now fully in the open, or more likely, it was expanding rapidly with 9 new hierarchs.

Despite the explosive expansion of the church, the great temples of Zeus, Aphrodite and Apollo still were maintained and had adherents. The temple of Apollo at Kourion witnessed some repaving work in the second quarter of the fourth century (Soren 1987). The religious divisions do not seem to have led to much internal tension. Papageorghiou (1993:31) points out that 'In all the lives of the Cypriot saints with the exception of the conflicts between Christian and pagans referred to in the life of St. Tychon in Amathus, the relations between Christians and pagans are even and friendly'. This is very different from the religiously fuelled violence in Egypt or the Levant during this time.

Divine tensions were made manifest, at least in Cypriot eyes, through a series of catastrophic earthquakes in the fourth century. Earthquakes are an endemic feature of life in an active seismic zone such as Cyprus. A devastating earthquake in 15 BC which destroyed Paphos led to imperial intervention and the renaming of the city. An earthquake in the late 70s may have led the Flavian emperors to mint silver coinage on the island immediately after the quake perhaps to act as an economic boost. However the second and third centuries appear to have been a seismically quiet period for Cyprus contributing to the economic health of the island. This terrestrial tranquility changed dramatically in the fourth century. Massive quakes struck Cyprus in AD 332, then again ten years later in 342. Finally a series of quakes struck the south coast between AD 365 and 370.

Ironically the earthquake of AD 332 appears to have led to the first "historical" impact on the Roman state since the Diaspora revolt 200 years before. Calocaerus, based on Cyprus, revolted against the rule of Constantine in AD 333.[2] He was defeated by Constantine's nephew Dalmatius and executed in Tarsus. Bowersock (2001) suggests that he may have been a Cypriot nationalist. The only documentation of a military garrison on Cyprus is a second century cohort from a Pannonian Legion (Mitford 1980). If they were still on detached service in 333, then at most we are talking about 500 soldiers. We do know that road repairs were undertaken after the 332 quake (Bekker-Nielsen 2004) so it is certainly possible that additional troops had been brought to the island to help in the recovery. Also, the naval contingent that Cyprus provided for Licinius indicates a naval presence which may have been restored to Cyprus after the combat between Constantine and Licinius. They probably first appeared on Cyprus after the Gothic piracy raids in the eastern Mediterranean in the late 3rd century. However you add it up, we are not talking about a large number of troops, certainly not the troop numbers needed for a successful revolt. Calocaerus is defeated in Cilicia, where Bowersock (2001:12) suggests he was trying to gather more support. Most frustratingly our sources do not tell us why Calocaerus revolted with such military imbalance. Was he a government official about to be called to task for administrative failings or corruption related to the recovery from the quake? Or was it religious in motivation, the actions of a man who knew he would win because he fought for the true gods against the new faith? We simply do not know.

The AD 342 earthquake effectively destroyed Salamis and severely damaged Paphos. Constantius II steps in to aid in the recovery and following the pattern established under the Julio-Claudians, renames the rebuilt city of Salamis 'Constantia', making it the new capital of Cyprus. Constantius, takes advantage of the disaster to the Cypriot cities to impose a new political orientation. By moving the capital to Salamis, Constantius is trying to link the entire island to Antioch, building on the long standing economic and cultural ties of the city of Salamis to the Syrian metropolis; additionally, this political realignment provides an added strategic bonus by placing Cyprus more directly under the watchful eye of the Praetorian Prefect of the Orient in Antioch.

Earthquake Destruction at Kourion

The clearest archaeological evidence of the devastation of the fourth century earthquakes is at the site of Kourion on the south coast of Cyprus where the University Museum of the University of Pennsylvania began working in 1934 (Davis forthcoming). The excavations were under the titular direction of Bert Hodge Hill, but the day to day field director was an amateur archaeologist, George McFadden. The quake debris was first identified in McFadden's trench III, where two skeletons, romantically named Romeo and Juliet by his assistant John Daniel, had been found in the first week of their excavations at the site. Although the human remains were carefully delineated and removed, further excavation of the earthquake debris in the domestic quarter was never undertaken by McFadden's team because they were interested in the public spaces of the city such as the theater, forum and basilica. Additionally, McFadden soon turned his personal attention to the excavation of the temple of Apollo Hylates, one km west of the city.

The so-called 'earthquake house' lay undisturbed for another fifty years until 1984 when David Soren, of the University of Arizona, decided to re-examine this part of the city (Soren and James 1988).[3] Soren had begun working at Kourion in the late 1970s but had focused on the temple of Apollo. He decided to reopen the former University Museum trench to help answer questions about the date of the quake that his work at the Apollo temple had raised.

The Arizona team began by relocating and reopening one room in McFadden's trench III. The initial excavation quickly showed that the University Museum team had not fully cleared the room which the new team proceeded to do, finding undisturbed material in the corners. After this was cleared, the decision was made to examine completely undisturbed material so an initial 5x5 m square was opened on the other side of the west wall of room 1.

After removing the Penn back-dirt and about a meter of nearly sterile post quake fill (slope-wash and aeolian deposition), the team came down on the intact earthquake debris. The area of the earthquake house was never reoccupied in a substantive way and aside from a post-quake rubble dumping episode and an ephemeral squatter occupation, the fourth century layer was essentially intact. (Soren and Davis 1985). The collapsed remains of the walls were carefully delineated and the collapse pattern indicated that an earthquake with an epicenter in the southwest, was the most likely cause of the collapse of the house. The field team first identified what appeared to be either a damaged sarcophagus or a water trough on the north side of which they discovered the remains of an iron chain. They excavated along the chain and at the end of the chain, emerging from the unexcavated soil, was the skeletal head of a mule or horse. At this point it was realized that this site might be something special. When the entire room was cleared, an ancient tragedy was illuminated. It was a moment frozen in time.

The excavation of the stable yielded a nearly completely restorable marble table top, a bronze lamp stand with dolphin–headed supports, glass and pottery vessels, a collection of small denomination coins, and the skeletal remains of a young teenage girl. Soren was convinced by the coins found in 1984 that this was the great earthquake described by the Roman historian Ammianus which occurred on 21 July 365, although he had earlier dated the quake to AD 370 (Soren 1981). In his popular book on Kourion, Soren called it 'the earthquake that ended Antiquity' (Soren and James 1988).[4] The Kourion quake was a deadly one with a high cost in human lives. The Earthquake house and its immediate surroundings yielded 8 sets of human remains, including a family huddled together(Figure 5). The excavators found a ring with a C*hi/Rho* symbol on the finger of the male skeleton; this was a Christian family.

Paganism Shaken

The earthquakes provoked crises of faith on Cyprus. Both the traditional Cypriot pagan religion expressed most visibly through cultic worship at the ancient temples and the newly emergent Christianity of the bishops were challenged by the "divinely ordained" destructions.

For paganism, the effects of the earthquakes are catastrophic. The temple of Zeus at Salamis is badly damaged in AD 342. The Apollo Temple at Kourion is also totally ruined in the same quake that destroyed the earthquake house. These major cult sites never regain their function although some repairs may have been made to the Zeus temple at Salamis. At some point probably the (AD 365/370 quakes), the temple of Aphrodite is destroyed although medieval activity at the site makes the exact date impossible to determine. According to Jerome in his *Life of St. Hilarion*, St. Hilarion arrives on Cyprus in the immediate aftermath of the quake, 'After entering Paphos, the city in Cyprus made famous by the poets' songs, which has on several occasions been destroyed by earthquakes and whose ruins alone now provide evidence of what it once was' he rests (Life of St Hilarion 42). Jerome, not being local has probably conflated the temple site ('made famous by the poet's songs'), with the city.

Figure 5: *The remains of the Kourion family huddled together in an attempt to survive the fourth century earthquake. Photo Thomas W. Davis*

The destruction of the major pagan sanctuaries strikes at the heart of traditional pagan Cypriot beliefs and practices. Why was this allowed to happen? If the gods in their anger at the loss of worship and the rise of Christianity allowed the total destruction of their own shrines when sacrifices and offerings could be freely offered, what does that mean for the future?

Paul Stephenson (2009), in a recently published study of Constantine, defines a clear difference between pagan and Christian responses to crises.

> *Where pagan social networks were fractured or destroyed by death and displacement, new Christian networks emerged. And within these circles Christians offered explanations…it was not random, but rather God's means of separating those who worshipped correctly and those who did not. Or: Christians who died would be rewarded, for they had joined their Lord and later be reunited with loved ones who survived. Paganism offered no justifications; no promises (Stephenson 2009: 44).*[5]

There are no written sources that give us a specific Cypriot pagan response, but we can infer a response from the archaeological discoveries at Paphos. The excavations, carried on since the 1960s, have uncovered a wealthy urban community. The ruins of one urban villa, named the House of Aion by the excavator, yielded a magnificent triclinium floor mosaic depicting mythological scenes (Daszewski et al. 1984). The theme of the scenes are: Leda and Zeus as a Swan; Dionysus as a child; the beauty contest of Cassiopea and the Nereides; a Dionysiac procession; and, the judgment of Apollo after the music contest between the arrogant Marsyas and the god of music himself. All the scenes focus around a mostly destroyed central figure of Aion, Father Time.

This floor is an artistic masterpiece, a prime example of pagan religiosity, and according to the Polish excavator Daszewski (1998) dates to the mid-4th century, after the initial quakes.. 'This mosaic, in all probability, was made in the intellectual climate which brought to light the pagan reaction under the reign of Julian the Apostate' (Daszewski 1998)[6]. This would place it after the AD 332 quake but before the 365/370 tremors which destroyed the house. Michaelides (1992:54) places it slightly earlier, into the second quarter of the 4th century based on a recovery of a coin of Licinius in the bedding for the mosaic (AD 314-324). This coin provides a *terminus post quem* for the mosaic which could well be laid after the 332 quake.

Daszewski uses the appearance of Dionysius in two of the panels as the key to unlock a possible meaning to the composition. In his intriguing interpretation, the different scenes from Leda to the central figure of Father Time are to be understood through the lens of the neo-platonic doctrine of the soul. The floor metaphorically depicts the soul and its travels through the material world until it is liberated by death and enjoys a subsequent apotheosis, all under the watchful eye of the master of eternity. Dionysus, being the son of a human woman and the god Zeus, is the symbol of the two elements of humanity, the soul and the body. He is the man who becomes a god and the model of the human soul who after death reunites with the divine soul. This is symbolized in the mosaic by the victory of

Figure 6: *The Judgment of Apollo from the House of Aion, Paphos. Photo Thomas W. Davis*

Cassiopeia over the sea creatures which stand for matter in the neoplatonic world. The punishment of Marysas by Apollo is illustrative of the price the soul must pay on its journey (Figure 6). Suffering has a purifying meaning. This is highlighted in the way the Dionysian procession is shown in the mosaic. Instead of an exuberant bacchic party, it is a solemn procession, signifying that death is only a passage to a different life (Figure 7). The Christian echoes are deliberate, an attempt to refute the new faith. 'We perceive in the Paphos mosaic, the desire of rich and cultured people, following traditional beliefs, to oppose the new religion by using or changing the ancient schemas which under a similar form are or will be used in the same way by Christians…' [the pagans of Paphos were] 'using the myths allegorically to show the neoplatonist way of salvation, while at the same time counterbalancing Christian teaching'(Daszewski 1998).

I suggest that the neoplatonist way of salvation is the Cypriot pagan answer to the dilemma posed by the earthquakes. The ceremonies and sacrifices in the old temples belong to the world of matter and are no longer necessary. The destruction of the shrines frees the individual to accept the suffering that comes with life as part of the preparation of the soul for the journey to the ultimate apotheosis.

Mythologically themed mosaics continued to be created in Paphos, suggesting that pagan belief may have continued in a quiet way. In the nearby House of Theseus, a mosaic of Poseidon and Amphitrite was created in the last quarter of the 4th century after the earthquakes. In the fifth century scenes from the Achilles cycle were used in the main audience hall. Of course it cannot be determined from the scenes alone whether the sophisticated owners of the post quake villa were pagan or Christian. Whatever the owner's personal faith was, the existence of the mosaics witnesses to a tolerant community.

Christianity Stirred

For Christian Cypriots the challenges of the quakes were somewhat different. The documented jump from 3 bishops at Nicea, to 12 organized hierarchs at the AD 342 Council of Sardica suggests that the Church on Cyprus has undergone the shift from a movement to an institution (as defined by North 1990). The organizational structure for a fully institutionalized church is in place before the earthquakes, but the physical infrastructure is not. To date, there is no clear evidence that any major Christian churches were destroyed in the 4th century quakes. It is certainly possible that the earliest phases of some of the late 4th century and early 5th century churches were built on earlier foundations, but we have no clear evidence of this. The great 5 aisled Basilica A at Soloi is certainly built over an earlier structure, probably a domus ecclesia with a mosaic reading 'Christ bless the donor of this mosaic' (Tinh 1985; Neal 2010) This may be the only pre-quake church on the island. The incomplete nature of these excavations leaves the date of this structure unclear.

The first clear Christian structures we can solidly date are post-quake, so the church is not wrestling with the destruction by God of his own houses of worship. They are of course dealing with the death and suffering of fellow believers as the tragic family from Kourion illustrates. A century later the Greek historian Sozomonos writing of the 'famous calamity' at the time of Julian the Apostate, says this was a sign of the wrath of God because Julian was trying to reverse the spread of Christianity and restore the worship of the old gods. David Soren (Soren and James 1988) considers this a reference to the Kourion earthquake. Of course, Sozomonos is not a Cypriot. However we do have an oblique response by a Cypriot Christian to the Kourion earthquake preserved in post-quake mosaic inscriptions at the site.

The Kourion inscriptions are from the House of Eustolios, an urban villa with a bathhouse that the owner, Eustolios, gave to his native city. One inscription has been restored to read 'Eustolios, having seen that the Kourians, although previously very wealthy, were in abject misery, did not forget the city of his ancestors but first having presented baths to our city, he was then taking care of Kourion as once did Phoebus Apollo and built this cool refuge from the winds' (Christou 2007). At the other end of this mosaic is another inscription saying 'In place of stone, solid iron, gleaming bronze and even adamant, this house is girt by the much venerated signs of Christ.' (Figure 8) Apollo could not provide for his city and prevent their abject misery, but now the city places its faith in Christ. Individuals convert to

Figure 7: *The Dionysian procession from the House of Aion, Paphos. Photo Thomas W. Davis*

Christianity from a variety of motives (MacMullen 1984), but Eustolios points to divine protection as the engine of change at Kourion. This was probably a common motivation in a province recovering from natural disasters. The story of St. Hilarion reinforces the protective aspect of the Christian faith response to natural disasters. Before the saint came to Cyprus, he confronted a tsunami produced by an earthquake and according to Jerome (40), calmed the swirling waters by making the sign of the cross three times in front of the wave.

In a new study of modern Christianity and culture change, James Hunter (2010) persuasively argues that cultural change on the magnitude of a fundamental religious reorientation on the societal level usually takes generations. Individuals may change, but such changes do not affect the general society until major institutions are influenced enough to be open to transformation. The autocratic power of Constantine, undergirded by his victorious military, begins the process of institutional change by giving preferential treatment to organized Christianity through such means as imperial donations of buildings and patronage (MacMullen1984). On Cyprus the earthquakes of the 4th century provide the catalyst that solidifies the transition of Christianity from a movement to an institution. After the quakes had literally cleared the scene of the physical pagan institutions, the Cypriot Church emerges from the rubble transformed into a dynamic and expansive, international force which is evidenced by the immediate response of church building. For example, at Kourion, Demos Christou has excavated a small church built in the earthquake ruins of the Nymphaeum in the forum, which he believes was constructed almost immediately after the quake and went out of use with construction of the grand basilica by Bishop Zeno after AD 410 (Christou 2007).

Figure 8: *Mosaic inscription from the House of Eustolios, Kourion. Photo Thomas W. Davis*

Figure 9: *Destruction debris at the Basilica of Soloi. Photo Thomas W. Davis*

The best examples of the Church Triumphant are the great Basilicas in Salamis and Paphos built before the end of the century. St Epiphanius built the Salamis basilica, a seven aisled basilica that at its construction was the largest church on the island. Epiphanius exemplifies the confident, international Cypriot church at the end of the fourth century. He was born between AD 310 and 320 in Palestine at Eleutheropolis, south-west of Jerusalem. He became a monk in Egypt, returned to Palestine and at the age of 20 founded a monastery near his birthplace. His rise to leadership follows Rapp's (2005) model of ascetic authority. At some point he was ordained a priest. According to Jerome he was shipwrecked at Salamis in 367 and was drafted by the local church to be their Bishop although not without opposition. The sources are silent as to why this important see was vacant. Is it just possible that the previous holder had been killed in one of the quakes? Epiphanius is a very popular bishop to his own flock, but a scourge to those he perceives as heretics. In this way he breaks from the pattern established by Spyridon and is instead very confrontational with his fellow bishops, particularly John Chrysostom in Constantinople. He travels all over the eastern empire and even gets to Rome.

The selection of Epiphanius as Bishop of Salamis may be seen as one element of a conscious campaign by the Cypriot church to promote strong links to the church in Palestine, at the expense of the church in Antioch. I suggest that as part of the campaign by the Cypriot church to gain its independence from the see of Antioch, the church focused on purported links directly to the church in Palestine thereby undercutting the claims of Antioch to be the 'mother church' of the Cypriots. Although the Book of Acts is quite clear that St Paul and St Barnabas visited Cyprus on a mission trip sent out by the Church in Antioch, the text also attributes the beginnings of Christianity in Antioch to Cypriot believers (Acts 11). This biblical attestation became a weapon in the arsenal of the next generation of Cypriot bishops who, confident in their faith and buttressed by an economic boom, began a campaign to gain complete ecclesiastical independence from Antioch at the Council of Ephesus in AD 431. Four traditions in particular point to direct Palestinian connections, bypassing Antioch: 1) the visit of Helen the mother of Constantine with a piece of the true cross; 2) the belief that Lazarus was the first Bishop of Kition (Larnaca); 3) the circulation of the text of the so-called Acts of Barnabas; and, 4) the discovery of the purported body of Barnabas and his handwritten copy of the gospel of Matthew. Although the story of the visit of Helen, Constantine's mother to Cyprus and her gift of a piece of the true cross which led to the founding of Stavrovouni monastery first appears in the Middle Byzantine period and the story of Lazarus is first recorded in the 8th century, the campaign to gain autocephalous status is the right psychological moment for these claimed roots to be first propagated. Some evidence supports this idea. The earliest construction surviving at Stavrovouni may date

to the fifth century (Stewart 2008: 201). Charles Stewart's recent study of early Byzantine domed basilicas on Cyprus suggests a sixth century date for the first church honoring Lazarus in Larnaca.

An inscription found at the basilica of Soloi, from another time of challenge for the Church, the seventh century, best summarizes the theological worldview that provided the Cypriot church with its vision and activism (Figure 9). The Soloi inscription records the aftermath of a major Arab raid in AD 653 when the basilica was burned. 'The goodness of God, the lover of mankind, is great and his forbearance ineffable, His judgment unsearchable because He is long suffering as much as He wills. As being good, he disciplines; again as a loving Father, he shows himself with mercy for a return and amendment; because neither is his judgment without mercy, nor his mercy without judgment' (Neal 2010: 15). This understanding of the Providence of God, mercy and judgment together, hammered into their consciousness in the fourth century, provides the bedrock upon which the church of Cyprus has stood for 1500 years.

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Bibliography

Bekker-Nielsen, T., 2004 *The Roads of Ancient Cyprus,* Museum Copenhagen: Tusculanumk Press University of Copenhagen.

Bowersock, G.W., 2000 *The International Role of Late Antique Cyprus,* The Bank of Cyprus Cultural Foundation Nicosia.

Braudel, Fernand, 1972 *The Mediterranean in the Age of Philip II,* Vol. I. New York: Harper&Row.

Christou, Demos, 2007 *Kourion: Its Monuments and Local Museum*, Nicosia: Pante Press.

Costello, Benjamin IV, Forthcoming The Earthquake House at Kourion: An Analysis of the Material Culture, in *The Ancient Kourion Area: Penn Museum's Legacy and Recent Research In Cyprus*, ed. Herscher, The University Museum of Archaeology and Anthropology, University of Pennsylvania.

Daszewski, W.A., B. Lichocka, J. Mlnarczyk and Z. Sztetyllo, 1984 Fouilles Polonaises a Kato Paphos: Chantier de Malounta, *Report of the Department of Antiquities, Cyprus*, 294-312.

Daszewski, W.A., 1998 Le mysterieux message des mosaiques de Paphos, *Le Monde de la Bible,* Juillet-Aout 1998.

Davis, Thomas W., Forthcoming An Amateur's Dream: McFadden at Kourion, in *The Ancient Kourion Area: Penn Museum's Legacy and Recent Research In Cyprus,* ed. Herscher, The University Museum of Archaeology and Anthropology, University of Pennsylvania**.**

Hill, G.H., 1940 *A History of Cyprus, Vol. 1: To the Conquest by Richard Lion Heart,* Cambridge: Cambridge University Press.

Hunter, James D., 2010 *To Change the World: The Irony, Tragedy, and Possibility of Christianity in the Late Modern World*, London: Oxford University Press.

Iacovou, Maria, 2006 'Greeks', 'Phoenicians' and Eteocypriots': Ethnic Identities in the Cypriot Kingdoms, in *Sweet Land: Cyprus through the Ages,* eds. J. Chrysostomides and Ch. Dendrinos, Camberely, Surrey: Porphyrogenitus, 27-59.

Jerome, 1988 Life of St Hilarion*,* in *Early Christian Lives*, ed. and trans. Carolinne White, London: Penguin Books, 85-116.

Kaldelis, Anthi, 2008 *Roman amphorae from Cyprus: integrating trade and exchange in the Mediterranean***,** Ph.D Thesis, University College London.

Karageorghis, Vassos, 1980 *Cyprus: from the Stone Age to the Romans*, London: Thames and Hudson.

Knapp, A. Bernard, 2008 *Prehistoric and Protohistoric Cyprus: Identity, Insularity, and Connectivity,* Oxford: Oxford University Press.

Lund, John, 2006 On the circulation of goods in Hellenistic and Early Roman Cyprus: the ceramic evidence, in *Panayia Ematousa II: political, cultural ethnic and social relations in Cyprus: Approaches to regional studies*, ed. by L. Wriedt Sorensen & K. Winther Jacobsen., Athens: Danish Institute of Athens, 31-49.

MacMullen, Ramsey, 1984 *Christianizing the Roman Empire: A.D. 100-400,* New Haven: Yale University Press.

Mitford, T.B., 1980 Roman Cyprusm, in *Aufsteig und Niedergang der romischen Welt Teil II Principat*: 7(2). Berlin: Walter de Gruyter 1980: 1285-1388.

Mitford, T. B. and I. K. Nicolaou, 1974 *Salamis Vol 6, The Greek and Latin Inscriptions from Salamis,* Nicosia: Department of Antiquities, Cyprus.

Michaelides, D., 1992 *Cypriot Mosaics,* Nicosia: Department of Antiquities.

Michaelides, D., 1996 The Economy of Cyprus during the Hellenistic and Roman Periods, in *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day,* ed. Karageorghis and Michaelides. Nicosia: Bank of Cyprus.

Neal, David, 2010 *The Basilica at Soloi, Cyprus: A survey of the buildings and mosaics,* IRG Group for SAVE/USAID.

North, Douglas, 1990 *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press, 1990.

Papagiorghiou, A. 1993 Cities and Countryside at the end of Antiquity and the beginning of the Middle Ages in Cyprus, in *Sweet land of Cyprus,* Nicosia: Cyprus Research Centre, 27-51.

Rapp, Claudia, 2005 *Holy Bishops in Late Antiquity*, Berkeley: University of California Press.

Runcimin, Stephan, 1990 The Byzantine Period, in *Footprints in Cyprus,* ed Hunt, London:Trigriph Limited, 136-174.

Soren, David, 1981 Earthquake: the Last Days of Kourion, in *Studies in Cypriote Archaeology,* eds. Soren and Biers, Monograph XVIII Institute of Archaeology, Los Angeles: University of California, 117-134.

Soren, David. and T.W. Davis, 1985 Seismic Archaeology at Kourion: The 1984 Campaign, *Report of the Department of Antiquities, Cyprus,* 293-301.

Soren, David, R. Gardiner, and T. W. Davis, 1986 Archaeological Excavation and Analyses of Earthquake-affected Strata at Roman Kourion, *Report of the Department of Antiquities, Cyprus,* 202-206.

Soren, David, ed., 1987 *The Sanctuary of Apollo Hylates at Kourion, Cyprus*. Tucson: University of Arizona Press.

Soren, D. and J, James, 1988 *Kourion: The Search for a Lost Roman City*, New York: Anchor Press Doubleday.

Stephenson, Paul, 2009 *Constantine: Unconquered Emperor*, Christian Victor. London: Quercus.

Stewart, Charles, 2008 *Domes Of Heaven*, Ph.D. Thesis, Indiana University, Bloomington Indiana.

Tinh, T.T., 1985 La Basilique, in *Soloi: Dix campagnes de fouilles (1964-1974),* Gagniers et Tinh, Sainte-Foy: Les Presses de l'Universite Laval.

Endnotes

1. In the identity politics of modern Cyprus, Greece and Turkey are celebrated and/or vilified by modern Greek and Turkish Cypriot communities who refer to the island as their 'homelands' and the core of their cultural identity. This is visually emphasized by the flying of Greek national flags at orthodox churches in the areas under the de facto control of the Republic of Cyprus and the flying of Turkish flags at mosques in the area under the de facto control of the Turkish Cypriot Community.
2. Tradition associates him with the importation of cats onto the island to control an infestation of snakes (Runciman 1990:139). If this is true, than his real impact on history maybe the large population of feral cats on the island today!
3. I was privileged to be the field director at the earthquake house in 1984 and 1985 while I was a graduate student at the University of Arizona (although I am not mentioned in the text by Soren and James (1988) beyond the list of field crew). The results of the excavation of the city site remain poorly published (Soren and Davis 1985; Soren et al. 1986; Soren and James 1988), but this will soon be rectified by Benjamin Costello, a Ph.D. candidate at SUNY Buffalo who has made the earthquake house at Kourion his dissertation topic. The discussion above reflects my own interpretation.
4. David Soren always wanted to be a filmmaker and I think his love of the dramatic overcame his scholarly restraint regarding the dating of the quake. During his excavations of the Temple of Apollo, he thought the quake dated to AD 370 based on coin evidence from Apollo (Soren 1981). I think the dramatic nature of the excavation at the earthquake house appealed to his theatrical side and led him to associate the quake with the AD 365 event described by Ammianus Marcellinus. Costello's reexamination of the coinage from Kourion and their find-spots supports a 370 date for the event (Costello forthcoming).
5. Paul Stephenson is here following the lead of Rodney Stark (as Dr. Stephenson politely pointed out in a personal communication).
6. I want to thank my wife, Jennifer Davis, for translating a number of articles written in French which I used in preparing this paper. The quotations from Daszewski (1998) are from her translation.

Fragment of an Old-South-Arabian Dedicatory Stela IA17.127

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Abstract: The paper identifies object IA17.127 as a fragment of an Old-South-Arabian stela from Qataban (east of Saba/Sheba), of 1st centuries BC/AD, recording a family's offering to the deity Anbay; only the top right-hand section survives.

This fragment of a stela of calcite preserves part of the first 5 lines of an inscription expressed in the Qatabanian dialect of Old-South-Arabian (Figure 1). It is in the collection of the Australian Institute of Archaeology and was obtained in 1956 from A.G. Hamad, Cairo. Its present-day maximum dimensions are width, 24.0 cm (8 in,), height, 20.5 cm (2⅜ in.) and thickness 6.5 - 8.0 cm (2½ - 3in). At the right-hand side, there survives part of its original twin-fluted margins. The top and left-hand margins are wholly lost, plus any further lines after the 5th, such that three-quarters of the original text are now missing. It is probable that at least half of our longest-preserved (= second) line is now missing, and proportionately more of the other four.

Both the forms of the script and the mention of the deity An[bay] indicate the region of origin of this piece. The fact that the surviving text is not funerary in content but records offering(s) to that deity may suggest that it had originally been set up in Anbay's temple, probably in Tamna' (or, Timna'), capital of Qataban, now the archaeological site known as Hajr Kohlan. On Anbay, cf. the account by M. Höfner, in Haussig (1965: 496-7). The script-forms point to the turn of the Era; - so, the very shallow angle of *r*; the tall, narrow *f* with absolutely straight sides and angles; the *m* with sloping top and foot, and slightly angled curve, and the form of *z'*; cf. the palaeographical charts in Kitchen (2000: plates XLIII - XLVIII).

Figure 1: *Photo of IA 17.127 - fragment of an Old-South-Arabian stela, 24 cm wide and 20.5 cm high. Photo H. Huggins*

We may transliterate the extant text as follows:

(1) […….] *traces traces* […….……]

[……..] (2) *k* [*y/l/g*] / bn / H z' w [^{c} / ……]

(3) *s q n y w / ' n* [*b y /* ……...…..]

(4) *f r* ^{c} *m / f r* ^{c} [*w /* ….……]

(5) […….] / […] ' […… *rest lost* ....].

And translate with possible restorations, as follows:

(1) [*A son of B, C son of D,]

[….] (2) ka[y/l/g], son of Khaz'wa[^{c} , and E son of F]

(3) have dedicated (this stela), (to the god) An[bay, … *epithets, lost* …],

(4) (as) an offering (that) [they] have offer[ed to him, …….]

(5) […….] *traces traces* [… *rest of text, lost* …….].

Here, the god Anbay is attested as the second most important deity in ancient Qataban, runner-up to Amm, head of their pantheon (cf. Höfner, *op. cit.*, above.) The terms for 'offer', 'offering', are well attested from other Qatabanian inscriptions, as instanced by Ricks (1989: 131), under FR^{c} I-II.

Our sole surviving personal name is found in one other Qarabanian piece, a statuette also dedicated at Tamna', now in Aden Museum in Yemen, published by Pirenne (1962: 258, pl. XV, top left), and the name booked-in by Harding (1971: 224).

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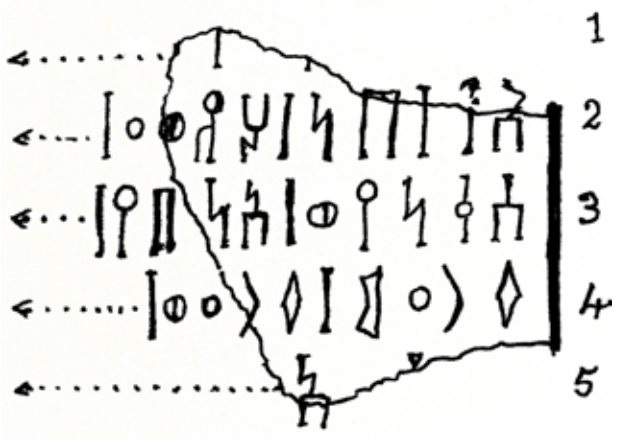

Figure 2: *A hand copy of IA 17.127 - fragment of Old-South-Arabian stela*

Bibliography

Harding, G. L. 1971 *An Index and Concordance of Pre-islamic Arabian Names and Inscriptions*, Toronto: University Press.

Haussig, W. (ed.) 1965 *Wörterbuch der Mythologie, Erste Abteilung, Die alten Kulturvölker* Band I, *Götter und Mythen im Vorderen Orient,* Stuttgart: Ernst Klett Verlag.

Kitchen, K.A. 2000 *Documentation for Ancient Arabia II,* Liverpool: Liverpool University Press.

Pirenne, J. 1962 Notes d'archéologie sud-arabe III, *Syria* 39, 257-262.

Ricks, S.D. 1989 *Lexicon of Inscriptional Qatabanian*, Studia Pohl 14, Rome: Pontificio Istituto Biblico.

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Uncovering the Kingdom of Heaven: Archaeological Exploration and the Gospel of Matthew

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Abstract: The 'Kingdom of God' is a common term found in the New Testament Gospels as a descriptor of the reign of God, but the Gospel of Matthew uniquely and consistently replaces this term with the 'Kingdom of Heaven.' Interestingly, the mosaic art uncovered in a number of second to fifth century CE synagogues excavated over the last sixty years in Israel-Palestine also portray the heavens symbolically using the form of zodiacs and surrounding them with symbols of Israel's ancient story. In particular, the story board of the mosaic floor of an excavated fifth-century CE synagogue in Zippori (Sepphoris) shows remarkable similarities with a narrative structure discernible within the Gospel of Matthew. This may point to a period of common cultural understanding, and even dialogue, between Rabbinic Judaism and Early Christianity.

Introduction

Theological reflection, artistic expression and rational human understanding have long been creative partners in the human search for holistic meaning. Furthermore, there is evidence that these creative partners have influenced the writing of the Christian Scriptures as well as inspiring its interpretation. This paper will build upon recent biblical and archaeological scholarship[1] to explore one cultural symbol that appears to have reflected a 'fundamental current'[2] within the diverse religious expressions that emerged within first-century Judaism and nascent Christianity.[3] Furthermore, it will be proposed that the Gospel of Matthew employs a distinctive literary framework that may have been inspired by contemporary literary and artistic expressions of a Jewish cosmic concept of the heavens (οὐρανοῖ) as a spiritual and substantial location for the creative global presence of Israel's God.[4]

The heavens as an interpretive key in the First Gospel

The Gospel of Matthew consistently describes the reign of God in terms of 'the kingdom of heaven: ἡ βασιλεία των ουρανων,' a term never employed in the other synoptic Gospels. Most scholars explain this usage in terms of the apocalyptic nature of the Matthean discourse and/or as a paraphrase of the words 'kingdom of God: ἡ βασιλεία του θεου' so as to avoid offending Jewish readers by deleting the name of 'God.'[5] Other scholars ignore the difference altogether assuming that the terms 'kingdom of God' and 'kingdom of heaven' are synonymous.[6] But careful exploration of the consistent and unique Matthean references to 'the kingdom of heaven' along with other related literary elements, provides an underlying narrative framework that suggests a distinctive theological understanding in the First Gospel. For example, a comparison of the Lord's Prayer in Matthew's Gospel with that in the Gospel of Luke exemplifies these differing emphases (Table 1)

Matthew 6:9-13	Luke 11:2-4
9 "Pray then in this way: *Our Father in heaven,* hallowed be your name.	2 Father, hallowed be your name.
10 Your kingdom come. *Your will be done, on earth as it is in heaven.*	Your kingdom come.
11 Give us this day our daily bread.	3 Give us each day our daily bread.
12 And forgive us our debts, as we also have forgiven our debtors.	4 And forgive us our sins, for we ourselves forgive everyone indebted to us.
13 And do not bring us to the time of trial, but rescue us from the evil one.	And do not bring us to the time of trial.

Table 1: *A comparison of the text of the Lord's Prayer in the Gospels of Matthew and Luke demonstrating Matthew's emphases in Italics*

The reign of God in the First Gospel

Cosmic elements feature in the birth, infancy and temptation narratives in the first four chapters of Matthew's Gospel as well as in the final passion and resurrection narratives. Prophetic and nurturing angels appear (Matthew 1:20-21; 2:19-20; 4:11; 28:2-5), wise astrologers from the East follow a significant star sign, disclose their understanding (2:1-16) and threaten the Jerusalem religious power group who appear to lack insight and are confused (2:3-12). The implicit in-breaking of a cosmic dimension is then articulated. The inauguration of the kingdom of heaven on earth is first proclaimed in the midst of water and light as John the Baptist announces Jesus to the world (3.2). The voice of God is heard affirming John's announcement (3.16-17) and this kingdom of heaven begins to cut through the human definitions of time and space. The faithful dispirited and persecuted ones not only find a welcome (5.3, 10-12) but enter into a lifelong journey of formation as community leaders who will nurture their followers appropriately and bring light into the world (5.13-16). This new kingdom is described as an ordered place embracing all human and environmental reality under the inclusive and permissive rule of God (5.34-48) where a costly continuity between words and deeds is applauded.[7] While words alone are not enough (5.14-20), appropriate words are explicitly prescribed (6.1-10) and they support an economic kingdom in which goods are shared in a spirit of mutuality and interdependence (6.20-33; 7.11; 19.21-23).[8] This reign of God is as productive as the global vegetation (13.24-32), as permeating as yeast (13.33), as valuable as fine possessions (13.44-46) and abundantly provides for all (14.17-18).

The Matthean concept of the kingdom of heaven is embedded in Israel's story, and while it is inclusive of race, status, gender and sexuality (8.10-13; 18.19; 20.1-16; 22.1-10), it is understood better by the innocent young than experienced elders (11.25; 18.1-5, 10, 14; 19.13). It is good news to all humanity and to be proclaimed and demonstrated unconditionally throughout the nations (10.7-8). A special place is reserved for the faithful who share this good news beyond their tribal boundaries (10.32; 11.11) so that new cosmic boundaries are established and a new form of kinship is inaugurated (12.50; 16.1-19; 18.18-35; 23.8-12). It exists in the midst of antagonism and threat but no attempt is to be made to eliminate the strange or the different. In the kingdom of heaven ambiguity will always be a present reality (13.47-51; 15.13-14).[9] At the same time, it is also a realm in which judgment will be exacted, bringing both rewards and penalties depending on the faithfulness shown to the Divine ethos that has been disclosed in the person of Jesus (7.21; 10.33; 11.12-15, 22-23; 22.11-14; 23.13, 29; 24.36). The cosmic dimensions of this heavenly kingdom are described in terms of 'clouds of heaven' (24.30; 26.64), 'the four winds from one end of heaven to the other' (24.30,31) and the place of 'power' (26.64). It is a place where angels dwell (24.36; 28.2), along with the Son of Man (26.64).

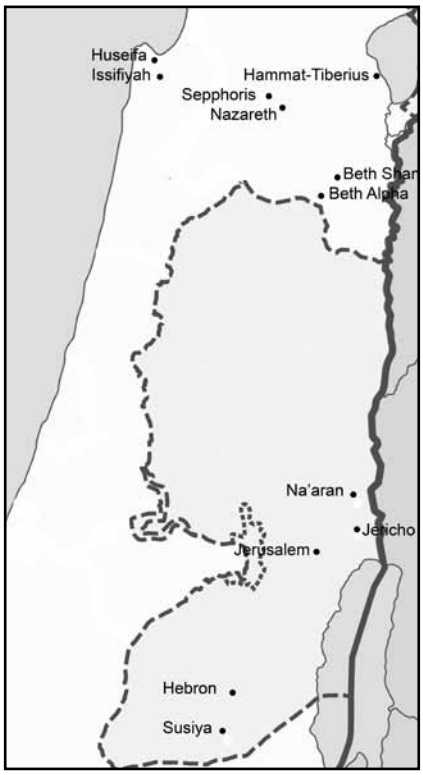


Figure 1: *A map showing the locations mentioned*

Cosmic Parallels in Early Synagogue Art

The intricate narrative threads that weave the kingdom of heaven images through the Matthean text are challenging concepts for a reader who is limited by the textual parameters of historical-critical studies. The New Testament Gospels are much more than historical records. They reveal a symbolic world that is more than words on paper. Furthermore, these revealed 'sacred symbols' have the powerful capacity to shape and reinforce the 'ethos' of a community and its prevailing 'worldview' (Geertz 1973: 112). The resulting symbols and their images invite the possibility of connections with other textual and even non-textual contemporary expressions such as public religious art and architecture.[10] In particular, the narrative structure of the Gospel of Matthew has strong connections with the art and architecture of early synagogues in Palestine and the Jewish diaspora.[11]

From the first-century BCE literary and architectural evidence of active synagogue life can be found wherever Jewish communities gathered,[12] and after 70 CE this evidence becomes increasingly present in Palestine.[13] Examination of symbolic elements in the art and architecture of both early (second–temple) and later (post 70CE) ancient synagogues reveals at least two distinct interpretive streams, presumably reflecting the variant frameworks of understanding that influenced the worship life of Jewish communities.[14] Some synagogues have no evidence of any architectural embellishment, while others have paintings (frescoes) and elaborate mosaic carpets that depict Israel's place in God's history of salvation as well concepts reinforced by synagogal poetic liturgy.[15]

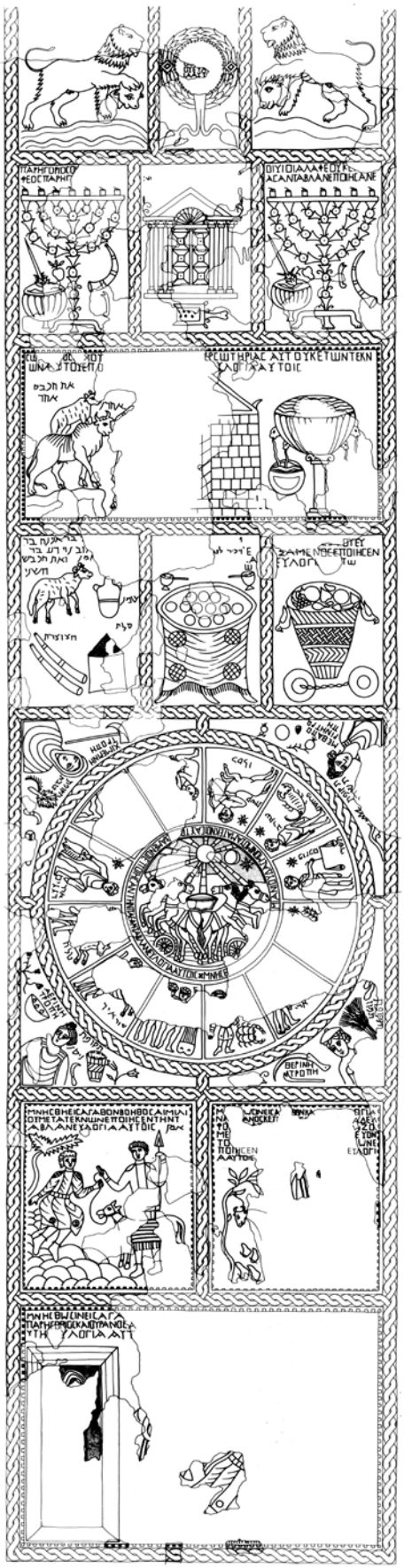
Figure 2: *A photo of the Sepphoris Mosaic. Image courtesy of www.HolyLandPhotos.org*

Matthew and synagogue art

This study focuses on the artistic decorations revealed in the excavations of a synagogue in Zippori, an ancient city more commonly known by its Greek name, Sepphoris. The importance of Sepphoris in understanding the earliest Jesus movement is being recognised increasingly by New Testament scholars.[16] A predominantly Jewish city situated just five kilometres from Nazareth in the Galilee region,[17] Sepphoris appears to have contained many synagogues during the first several hundred years CE (Chancey & Meyers 2000: 20; Weiss and Netzer 1998: 8-9). It was the home of significant rabbis throughout that time and is particularly notable as a place where the Palestinian Talmud was compiled. In fact, it is mentioned in Rabbinic literature more often than any ancient city except Jerusalem (Miller 1996: 59-65). Of particular interest is a synagogue in Sepphoris, which has been excavated over the last twenty years by the Hebrew University in Jerusalem. This excavation has yielded a fine example of a mosaic carpet that is consistent with others found in near by ancient synagogues. Generally, the mosaic carpets consist of three parts: an inscription or biblical scene, a central zodiac panel and a representation of Jewish religious objects such as the Ark, Torah, Temple/Tabernacle or menorah. Examples may be found in the synagogues at Hammat-Tiberias, Beth Shean, Beth Alpha, Na'aran and Issifiyeh (Ovadiah 1995: 309-314). Some are more detailed than others and some are more sophisticated in their artistic design than others. [18]

The Sepphoris synagogue mosaic is distinctively different. It is more detailed than other mosaic carpets and its artistic 'story board' shows a remarkable similarity to the narrative pattern of the Gospel of Matthew. On entry into the building there are two panels depicting the annunciation by an angel of the promise of a son to Abraham with the barren Sarah looking on hesitantly from behind a doorway. It is a parallel to the angelic revelation to Joseph in Matthew's Gospel where the fertile Mary is in the narrative background (Matt. 1:8-24). The synagogue carpet then follows on with a mosaic depiction of the 'binding of Isaac' or 'aqeda' where a threat to Abraham's son's life is alleviated by a message from God; a story with parallels to the threat to the life of the infant Jesus found only in Matthew's Gospel (Matt.2:13-9). The zodiac is next in the mosaic carpet sequence with its central motif of light from the Sun God coming down into water, its twelve human figures and its four female seasons. The Matthean baptismal narrative (Matt. 3:1-17) contains these same symbolic elements. The zodiac panel that follows reveals the cyclic wisdom of the heavenly God and the dimensions of the four corners of the earth. Parallels to this symbol are less evident in the Matthean narrative, but perhaps are reflected in the teachings of the Sermon on the Mount (Matt.5-7). Following on from the zodiac on the synagogue mosaic carpet is a series of panels on symbols of Torah Law that are thought to represent the 'consecration of Aaron and his sons to the service of the Tabernacle,' perhaps equivalent to the formation of the disciples for service as messianic followers of Jesus. The ultimate depiction on the mosaic carpet is a wreath motif guarded by lions, 'symbols of preservation and conquest' which have some connections with the final command of the risen Christ in Matthew's Gospel who urges his followers to 'go into all the world and make disciples.' (Weiss & Ehud 1998: 20)

The presence of a zodiac has caused some scholars to dismiss these recently excavated buildings in Israel - Palestine as legitimate Jewish synagogues, but evidence of astrology in Judaism can be found in the apocryphal Book of Jubilees, as well as in the Dead Sea Scrolls (4Q318).[19] In fact, the



1 **Symbols of preservation and conquest**
'Go into all the world and make disciples'
(28:18-20)

2 **Temple & menorah (priestly activity)**
Priestly conflicts
(27:55-28:17)

3 **Altar of sacrifice 'The one lamb'**
Trial and crucifixion of Jesus
(26:1-27:54)

4 **Preparing 'Aaron's sons for service'**
Preparing disciples for ministry
(5:1-25:46)

5 **Wisdom**
Teachings of Jesus

Creation: light, water, sun
Four seasons
Baptism of Jesus
(3:1-17)

6 **Binding of Isaac**
Rescue of the infant Jesus
(2:13-23)

7 **Annunciation to Abraham**
Annunciation to Joseph
(1:18-25)

Figure 3: *A diagram of the Sepphoris Mosaic showing the proposed Matthean structure. Drawing from Weiss & Netzer (1998: 14), courtesy of Prof. Zeev Weiss, The Sepphoris Excavations, drawing: Pnina Arad.*

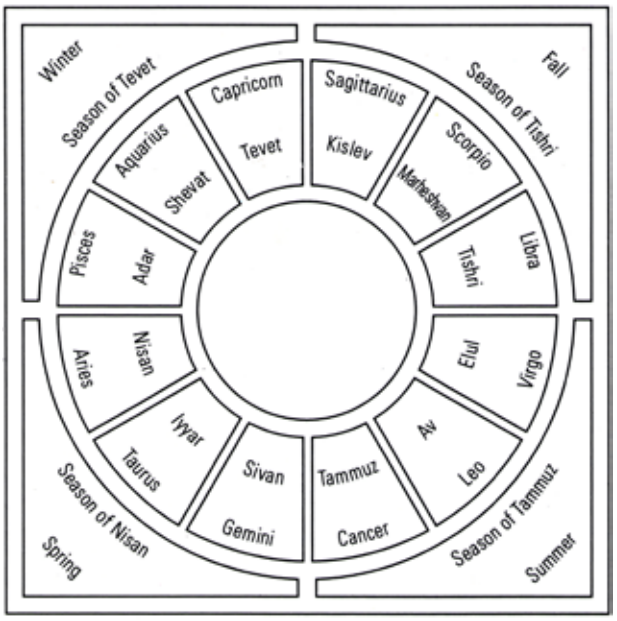


Figure 4: *A diagram of the circular portion of the Sepphoris Mosaic showing the seasons, zodiac signs and calender months. After Weiss & Netzer (1998: 28), courtesy of Prof. Zeev Weiss, The Sepphoris Excavations, drawing: Pnina Arad.*

Calendar Texts left by the Qumran community portray a heightened, almost obsessive, concern with cosmic measured time and astrological signs.[20] The orderly design of the zodiac with its stable mapping of the seasons, affirmation of the cycle of agricultural production, and cyclic rhythm of lunar sequences, provided a working model for the kind of restorationist movement that emerged during the Second Temple period. Each of the twelve tribes of Israel had a place in the divine order and was assigned to a calendar month-based roster that facilitated the orderly provision of sustenance to the unsettled population.[21]

In the first century CE, Josephus uses astrological language to describe the ritual lamp stands and bread of the presence in the Holy Place of the Jerusalem temple. The seven lamps, such being the number of the branches from the lampstand, represented the planets; the loaves on the table, twelve in number, the circle of the zodiac; while the altar of incense, by the thirteen fragrant spices from sea and from land, both desert and inhabited, with which it was replenished, signified that all things are of God and for God. (1987: 88, 707)[22]

Rachel Hachlili, in a series of somewhat defensive studies on the place of the zodiac in the Jewish worship arena, concludes that it 'was used primarily for its calendrical value.'(1996, 121) But this conclusion is questioned by Leslie Hoppe who asserts that 'such an explanation ignores the written sources that contain 'positive references to astrology' and that 'fixed calendars were not introduced until about 325 CE.'(Hoppe 1994: 58-59) Marianne Sawicki, coming from a different perspective sees the synagogue floors as 'defiances of Roman time' or 'symbolic resistance to the incursions of Empire, arguing that the mosaic floors with their zodiacs are '[T]he' architectural co-opting of imperial time by the synagogue community' in opposition to 'the rabbi's attempt to assert liturgical time control.'(Sawicki 2000) [23] In addition to Temple-based Judaism and Essenism, astrological symbolism is also evident in Samaritanism. Ness asserts that his research has convincingly demonstrated that, 'Astrological ideas and symbolism were so pervasive that Judaism was influenced by imagery drawn from astrology.'(Charlesworth1977) Bruce Malina agrees, describing scholars who neglect the 'sky dimensions of life' in their analysis of biblical texts as anachronistic in their 'ethnocentric perspective' and noting that 'The inhabitants of the sky formed an integral part of the social environment of the period. The huge amount of astral documents from the Greco-Roman period makes it quite obvious that for the contemporaries of Jesus, sky and land constituted a single environmental unit, a single social arena.'(1997: 83)

In determining the origin of such ideas within Judaism, Gerhard von Rad argues that Deuteronomic theology places the heavens as the dwelling place of Yahweh in an attempt 'to clarify the problem of Yahweh's transcendence and yet . . . commitment to Israel.' He goes on to state that 'the concept of 'God of heaven' probably emerged during the Persian period of the Babylonian exile and is exemplified by the use of the expression 'God of heaven' in Daniel 2.18-44 as he 'bears witness to the God who in historical omnipotence controls the destinies of world empires and carries through His plans for the world.' In ancient astrological understandings both the immanent and the transcendent intersected.' In the opinion of Lester Ness, 'the planets were worshipped as incarnations of the gods. . . . the Mesopotamians believed that the planet-gods spoke to them by means of astral omens', that is, by the ordinary and 'the extraordinary events in the sky.'(Ness 1993) The heavens became a tethering point of reality, the dependable indicator of the mind and actions of the highest god and scholars generally concur with von Rad's observation that the early Yahwist writings (such as the second creation story in Genesis 2.4b-25) were 'formulated in a cultural and religious atmosphere that was saturated with all kinds of astrological false belief.'(von Rad 1972: 55)[24]

Von Rad cites early 20th century European scholarship[25] in defence of the idea 'that according to the law of correspondence between the macrocosm and the microcosm the prototypes of all lands, rivers, cities and temples existed in heaven in certain constellations, while these earthly things are only copies thereof,' going on *to* note that 'this speculative view of the world was obviously alien to the older belief in Yahweh.' (1976: 508) Wolfgang Hübner points out the literary connections that were made between the patriarchs of Israel and the twelve zodiac figures (1983: 24),[26] and Avigdor Shinan points to the zodiac images in a number of *piyyutim* such as the selection below that was derived from one written for use on Tisha

Figure 5: *The baptism of Christ, the apostles and the empty throne. The dome of the Arian Baptistery in Ravenna, Italy, 493-526CE.*[30] *Photo by Jim Forest, http://i.images.cdn.fotopedia.com/flickr-888696694-image/*

b'Av. It reads in part:

> *Then, because of our sins, the Temple was destroyed*
> *And the sanctuary was burnt because of our iniquities.*
> *The tribes of Jacob cried in sorrow*
> *And even the constellations shed tears*
> *The Lamb cried first, its souls saddened*
> *Because its little lambs were led to slaughter.*
> *The Bull made its cry heard in the heavens*
> *Because we were all pursued to the very neck . . ..*
> *Heaven shook from the roar of the Lion*
> *Because our roar [of supplication?] did not rise to heaven*
> *Virgins and young men were killed*
> *And therefore the Virgin's face was darkened.*
> (1996: 148)[27]

Just as they had done with Canaanite and Greek cultures before, the Hebrew traditions assimilate and acculturate many influential cultural concepts adopted during their exilic journeys. The signs of the Zodiac were given specifically Jewish meanings and associations: the lion became the royal lion of David, the twins became Cain and Abel, and so on. Clearly, the Judeans adopted calendrical understandings from neighbouring societies both before and during the Second Temple period, 'the ancient Egyptian solar calendar, the Babylonian lunar calendar, and the Israelite seven-day week' undergirding the temporal rhythm of Judaism (Stegemann 1998: 166).

Conclusion

The textual and visual components that form the basis for this study suggest that there is a clear example of a contiguous form of acculturation and cultural assimilation that informed the narrative tapestry of at least one expression of Rabbinic Judaism and early Christianity.[28] Scholars are divided in their views on the relationship of the Gospels of Matthew to formative Judaism in the later first-century, but increasingly, there is recognition of the diverse nature of first-century Palestinian Judaism and of continuity and discontinuity between the social settings of the later Gospels.[29] The Jewish voice reflected in Matthew's Gospel is one that stands firmly in a post-exilic Hebrew cosmic tradition from which the book of Jonah developed. It is a voice being heard at a time of dislocation and reestablishment when the cosmic dimensions of the 'God of heaven' offered a theological basis for the kind of mutuality and interdependence necessary if a dispersed people with diverse spatial locations were to gather with a unified worshipping identity. In the period after the destruction of Jerusalem, such a social milieu confronted the resettling faith communities that had fled Jerusalem. It may be that the Sephoris synagogue mosaics are a reaction to the Matthean theology that was impacting a Jewish faith community in the late first century; or perhaps the Matthean leaders used a well understood synagogue storyboard ritual as a template through which to proclaim the story of Jesus, the promised Messiah. Certainly, it was not long before the Christians adopted the zodiac framework and embedded it into main-

stream church decoration as can be seen in the mosaic art on the dome of the sixth century CE Arian baptistery in Ravenna, Italy (Figure 5). Instead of zodiac symbols there are twelve apostles; instead of the central creation motif there is a depiction of the baptism of Jesus with a white dove descended from the heavens; and Jerusalem temple motifs are replaced by the Eucharistic elements of bread and wine (Macgregor & Langmuir 2000: 83).

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Bibliography

Avi Yonah, M. 1981 *Art in ancient Palestine: Selected studies,* Jerusalem: Hebrew University.

Avi-Yonah, M. 1984 *The Jews under Roman and Byzantine rule: A political history of Palestine from the Bar Kochbar war to the Arab conquest*, Jerusalem: Magnes Press Hebrew University.

Batey, R.A. 1992 Sepphoris, an urban portrait of Jesus, *Biblical Archaeological Review* 18, 50-62.

Batey, R.A. 2001 Sepphoris and the Jesus movement, *New Testament Studies* 46, 402-409.

Beare, F. W. 1981 *The Gospel according to Matthew,* Oxford UK: Blackwell.

Beasley-Murray, G.R. 1986 *Jesus and the kingdom of God,* Grand Rapids MI: Eerdmans.

Bickerman, E.J. 1965 Symbolism in the Dura Synagogue: A Review Article, *Harvard Theological Review* 58, 127-151.

Binder, D.B. 1999 Into the Temple Courts: The Place of the Synagogues in the Second Temple Period, Atlanta: The Society of Biblical Literature,http://www.pohick.org/sts/Intrononotes.html (accessed: 4/5/2005)

Boccaccini, G. 1998 *Beyond the Essene hypothesis: The parting of the ways between Quran and Enochic Judaism,* Grand Rapids MI / Cambridge UK: Eerdmans.

Boring, M.E. 1995 The Gospel of Matthew, *The new interpreters Bible* 8, Nashville TN: Abingdon.

Bornkamm, G., G. Barth, & H-J. Held 1963 *Tradition and interpretation in Matthew,* Philadelphia: Westminster.

Byrne, B. 2004 *Lifting the burden: Reading Matthew's Gospel in the church today,* Strathfield NSW: St Paul's.

Catto, S.K. 2007 *Reconstructing the first-century synagogue: A critical analysis of current research,* LNTS 363, New York: T.&T. Clark.

Chancey, M. & E.M. Meyers 2000 How Jewish was Sepphoris in Jesus time? *Biblical Archaeological Review* 26(4), 18-33, 61.

Charlesworth, J.H. 1977 Jewish astrology in the Talmud, *Harvard Theological Review* 70, 183-200.

Charlesworth, J.H. (ed.) 2006 *Jesus and archaeology*, Grand Rapids MI / Cambridge UK: Eerdmans.

Collins, John J. 1995 *The Scepter and the Star, The Messiahs of the Dead Sea Scrolls and Other Ancient Literature,* New York: Doubleday.

Crossan, J.D. 1998 *The birth of Christianity:* San Francisco: Harper San Francisco.

Davies, W.D. & D.C. Allison, Jr. 1988-1997 *A Critical and exegetical commentary on the Gospel according to Saint Matthew,* 3 Vols., Edinburgh: T. & T. Clark.

Edwards, D. 1992 The socio-economic and cultural ethos of the Lower Galilee in the First Century: Implications for the nascent Jesus movement, in L. I. Levine (ed.), *The Galilee in late antiquity,* New York/Jerusalem: Jewish Theological Seminary of America, 53-73.

Foerster, G. 1985 Representations of the zodiac in ancient synagogues and the iconographic sources, *Eretz-Israel* 18, 380-391.

Freyne, S. 1999 Behind the names: Galileans, Samaritans, "Ioudaioi", in E. M. Meyers (ed.), *Galilee through the centuries: Confluence of cultures,* Winona Lake IN: Eisenbrauns, 161-175.

Freyne, S. 2001 The geography of restoration: Galilee-Jerusalem relations in early Jewish and Christian experience, *New Testament Studies* 47, 289-311.

Geertz, C. 1973 *The interpretation of cultures: Selected essays by Clifford Geertz,* New York: Basic Books.

Gibbs, J.A. 2000 *Jerusalem and parousia: Jesus' eschatological discourse in Matthew's Gospel,* St Louis MS: Concordia Academic Press.

Goulder, M.D. 1974 *Midrash and lection in Matthew,* London: SPCK.

Gundry, R.H. 1994 *Matthew, A commentary on his handbook for a mixed church under persecution,* 2nd ed. Grand Rapids MI: Eerdmans.

Gutmann, J. 1987 The Dura Europos Synagogue Paintings: The State of Research, in L.I. Levine (ed.), *The Synagogue in Late Antiquity,* Philadelphia PA: American Schools of Oriental Research, 61-72.

Hachlili, R. 1996 Synagogues in the land of Israel, The art and architecture of late antique synagogues, in Steven Fine (ed.), *Sacred realm: The emergence of the synagogue in the ancient world*, New York / Oxford: Oxford University Press / Yeshiva University Museum, 96-129.

Hagner, D.A. 1993 *Matthew 1-13,* Waco TX: Word.

Hagner, D.A. 1995 *Matthew 14-28,* Waco TX: Word.

Harland, P.A. 2003 *Associations, synagogues and congregations: Claiming a place in ancient Mediterranean society,* Minneapolis MN: Fortress.

Harrington, D.J. 1991 *The Gospel of Matthew,* Sacra Pagina 1, Collegeville MN: Liturgical Press.

Hoppe, L.J. 1994 *The synagogues and churches of ancient Palestine,* Collegeville MN: Liturgical Press.

Horsley, R.A. 1996 *Archaeology, history and society in Galilee: The social context of Jesus and the rabbis,* Valley Forge PA: Trinity Press International.

Horsley, R.A. 1999 Jesus and Galilee: The contingencies of a renewal movement, in E.M. Meyers (ed.), *Galilee through the centuries: Confluence of cultures,* Winona Lake IN: Eisenbrauns, 58-65.

Hübner, W. 1983 *Zodiacus Christianus, Jüdische-christliche Adaptation en des Tierkreises von der Antike bis zur Gregenwart,* Königstein: Verlag Anton Hein.

Jaffee, M.S. 1997 Ritual space and performance in Early Judaism, *Early Judaism,* Upper Saddle River NJ: Prentice Hall, 164-212.

Josephus, Flavius 1926-63 *Complete Works,* 9 Vols. (trans. H. St. John Thackeray) Cambridge /London: Harvard University Press / William Heinemann.

Josephus, Flavius 1987 *The Works of Josephus*, William Whiston (trans.), Peabody MA: Hendrickson.

Kee, H.C. 1992 Early Christianity in the Galilee: Reassessing the evidence from the Gospels, in L.I. Levine (ed.), *The Galilee in late antiquity,* New York / Jerusalem: Jewish Theological Seminary of America, 3-22.

Kimelman, R. 1980 The daily Amidah and the rhetoric of redemption, *Jewish Quarterly Review* 79, 165-182.

Kraeling, C.H. 1956 *The excavations at Dura Europos – The synagogue final report.* Vol. 8, Part 1, New Haven CN: Yale University Press.

Levine, L.I. (ed.) 1982 *Ancient Synagogues Revealed,* Jerusalem / Detroit: Israel Exploration Society / Wayne State University Press.

Levine, L.I. (ed.) 1987 *The Synagogue in Late Antiquity,* Philadelphia: American Schools of Oriental Research.

Levine, L.I. 1996 The nature and origin of the Palestinian synagogue reconsidered, *Journal of Biblical Literature* 115, 425-448.

Levine, L.I. and Z. Weiss (eds.) 2000 *From Dura to Sepphoris: Studies in Jewish Art and Society in Late Antiquity,* JRA suppl. 40, Portsmouth: Journal of Roman Archaeology.

Macgregor N. & E. Langmuir 2000 *Seeing salvation: Images of Christ in art,* London: BBC Worldwide.

Malina, 1997 Jesus as astral prophet, *Biblical Theology Bulletin* 27, 83-98.

Matthews, T. F. 1993 *The clash of gods: A reinterpretation of early Christian art,* Princeton NJ / Oxford UK: Princeton University Press.

Miller, S.S. 1996 Hellenistic and Roman Sepphoris: The historical evidence, in Rebecca Martin Nagy, Carol L. Meyers, Eric M. Meyers & Zeev Weiss (eds.), *Sepphoris in Galilee. Crosscurrents of culture,* Raleigh NC: North Carolina Museum of Art, 21-27.

Miller, S.S. 1996 Jewish Sepphoris: A great city of scholars and scribes, in Rebecca Martin Nagy, Carol L. Meyers, Eric M. Meyers & Zeev Weiss (eds.), *Sepphoris in Galilee. Crosscurrents of culture,* Raleigh NC: North Carolina Museum of Art, 59-65.

Nagy R.M., C.L. Meyers, E.M. Meyers & Z. Weiss (eds.) 1996 *Sepphoris in Galilee: Crosscurrents of culture,* Winona Lake IN: Eisenbrauns.

Ness, L. 1993 Astrology and Judaism in late antiquity, PhD dissertation, http://www.smoe.org/arcana/diss1.html (accessed 11/9/ 2007)

Ovadiah, A. 1995 Art of the ancient synagogues in Israel, in Dan Urman & Paul V. M. Flesher (eds.), *Ancient synagogues: Historical analysis and archaeological discovery,* Vol 2, Leiden-New York-Köln: E.J. Brill,301-318.

Overman, J.A. 1990 *Matthew's Gospel and formative Judaism,* Minneapolis MN: Fortress.

Rappaport, U. 1991 The material culture of the Jews in the Hellenistic – Roman period, in Shearyahu Talmon (ed.), *Jewish civilisation in the Hellenisti- Roman period,* Philadelphia PA: Trinity Press International, 44-49.

Sabar, S. 2000 The Purim panel at Dura: A socio-historical interpretation, in L.I. Levine and Z. Weiss (eds.) *From Dura to Sepphoris: Studies in Jewish Art and Society in Late Antiquity*, JRA suppl. 40, Portsmouth: Journal of Roman Archaeology, 155-163.

Saldarini, A.J. 1994 *Matthew's Christian-Jewish community,* Chicago: University of Chicago Press.

Sawicki, M. 2000 *Crossing Galilee: Architectures of Contact in the Occupied Land of Jesus,* Philadelphia PA: Trinity Press International.

Schwartz, S. 2000 On the program and reception of the synagogue mosaics, in L.I. Levine and Z. Weiss (eds.) *From Dura to Sepphoris: Studies in Jewish Art and Society in Late Antiquity*, JRA suppl. 40, Portsmouth: Journal of Roman Archaeology, 165-81.

Segal, A.F. 1986 *Rebecca's children: Judaism and Christianity in the Roman world,* Cambridge MA: Harvard University Press.

Senior, D. 1988 *Matthew,* Abingdon New Testament Commentaries, Nashville TN: Abingdon.

Shinan, A. 1996 Synagogues in the land of Israel: The literature of the ancient synagogue and synagogue archaeology, in Steven Fine (ed.), *Sacred realm: The emergence of the synagogue in the ancient world*, New York / Oxford: Oxford University Press / Yeshiva University Museum, 130-152.

Sivan, H. in *Bryn Mawr Classical Revie*w, http://www.ccat.sas.upenn.edu/bmcr/2002/2002-06-25

Stanton, G. N. 1995 *The interpretation of Matthew*, 2nd ed., Edinburgh: T.&T. Clark.

Stegemann, E. & W. Stegemann 1995 *The Jesus movement: A social history of the first-century,* O. C. Dean Jnr (trans.) Minneapolis MN: Fortress.

Stegemann, H. 1998 *The library of Qumran. On the Essenes, Qumran, John the Baptist and Jesus,* Grand Rapids MI/ Cambridge UK: Eerdmans & Leiden: Brill.

Stock, A. 1994 *The method and message of Matthew,* Collegeville MN: Liturgical Press.

Talmon, S. 1991 Between the Bible and the Mishnah: Qumran, in Shearyahu Talmon (ed.), *Jewish civilisation in the Hellenisti- Roman period,* Philadelphia PA: Trinity Press International, 214-257.

Theissen, G. 1999 *A theory of primitive Christian religion,* London: SCM.

Tusk, T. 2000 Bringing water to Sepphoris, *Biblical Archaeological Review* 26, 34-41.

VanderKam, J.C. 2000 Calendars in the Dead Sea Scrolls, *Near Eastern Archaeology* 63. 3, 164-167.

von Rad, G. 1972 *Genesis,* rev. ed., London: SCM Press.

von Rad, G. 1976 οὐρανοῖ, in G. Kittel (ed.), *Theological Dictionary of the New Testament*, Vol. 5, Grand Rapids MN: Eerdmans, 508.

Wacholder, B. Z. 1974 *Eupolemus: A study of Judeo-Greek literature,* HUC Monographs 3, Cincinnati, NY: HUC.

Weiss, Z. & E. Netzer 1998 *Promise and redemption: A synagogue mosaic from Sepphoris*, Jerusalem: The Israel Museum.

Weiss, Z. 2005 *The Sepphoris Synagogue: Deciphering an Ancient Message: in Its Archaeological and Socio-Historical Contexts,* Jerusalem: Israel Exploration Society.

Westermann, C. 1984 *Genesis 1-11,* London: SPCK.

Wise, M., M. Abegg Jr & E. Cook, 1996 *The Dead Sea scrolls: A new translation,* Rydalmere NSW: Hodder & Stoughton.

Endnotes

1 'the discipline governing the study of the Bible and the discipline governing archaeological research are two separate and different disciplines based on independent principles, methodology and training. Neither can be used to prove or disprove the other. At the same time, we are not at liberty to ignore either one. Indeed they complement each other.' (Charlesworth 2006: 2)

2 'fundamental currents become evident . . . [and] . . .they represent in each case a specific and original answer to the crisis in Jewish society.' (Stegemann & Stegemann 1995: 138)

3 See Theissen, (1999: 1-18) for a description of the use of cultural sign systems as similar methodological approach that his been taken in this study for describing religious identity. Also note the trajectories outlined in the diagram, 'A map of middle-Judaisms,' sourced from Boccaccini (1998: xxii), recognising, also, the thesis of Alan Segal (1986) that early Judaism was the 'mother' of both rabbinic Judaism and early Christianity.

4 Goulder (1974: 172) asserts that the Gospel of Matthew is not so much a literary genre as a 'liturgical genre' that 'follows the lections of the Jewish year' according to the lunar calendrical formulae.

5 See the formative historical critical approach of Bornkamm, Barth, and Held (1963); and more recently, Beare (1981: 33); Davies and Allison, (1988-1997); Senior (1988); Harrington (1991); Hagner (1993) (Jewish sense); Gundry (1994: 43); Stock (1994) (1995); Boring (1995); Stanton (1995), Byrne (2004: 35).

6 For example Beasley-Murray (1986) does not discuss the difference at all and (1974: 103) includes a list of cosmic references in Matthew but neglects to include the heavens as a legitimate cosmic concept.

7 Gibbs describes the Matthean concept of the heavens as 'a sphere over which [God] rules that may be entered as one enters a "kingdom" or *Reich.'*(2000: 40)

8 Theissen writes, 'In Matthew, the *imitatio dei*, the imitation of God, is the central reason for loving one's enemies. Love of enemies is sovereign behaviour, behaviour that makes human beings godlike. It elevates them far above their situation – as high as the sun, which shines on good and evil alike.'(1999: 117*)*

9 See Seneca *De beneficiis* 4.26.1 'If, he says, you would imitate the gods, give benefits even to the ungrateful, for the sun shines even on the wicked, and the seas are accessible to pirates too.' (*Si deos, inquit, imitaris, da et ingratis beneficia, nam et sceleratis sol oritur et pirates patent maria*.)

10 Hoppe remarks 'Our ancestors left behind an enormous amount of non-literary sources that reveal much about what our ancestors believed and how they lived. Literary sources, after all, were produced by an elite class of believers and therefore do not always clearly reflect popular culture and religion.'(1994: 1)

11 For an extensive analysis of this topic see Catto who emphasises strongly that 'it should not be assumed that architectural features or styles found in one place existed in another' (2007: 8). Also, note that the apparent cognitive dissonance with the second commandment is addressed in the Targum Pseudo-Jonathan (an Aramaic paraphrase of Leviticus 26:1) that permitted the use of artistic ornamentation in synagogues. Commenting on this Hachlili notes that, 'Attitudes within the Rabbinic community were mixed in regard to art. Some sages were vehemently against art, even refusing to look upon the image of the emperor or a coin. Others considered it to be relatively harmless. A statement in the Jerusalem Talmud that was preserved in its entirety only in a manuscript discovered in the Cairo Geniza reflects a more tolerant (if somewhat ambivalent) position: "In the days of Rabbi Johanan they permitted images (tzayirin) on its walls, and he did not stop them. In the days of R. Abun they permitted images on mosaics and he did not stop them." (1996: 121)

12 Levine (1982: 1; 1987: 7). See also Josephus, *Jewish War*, 2.14.4-5, (1926-63: 328-29).

13 Levine (1996). The Greek *Theodotus* inscription from first century BCE Jerusalem is the oldest evidence for synagogues in Palestine.

14 Binder (1999) sees the differing elements as always relating to concepts of the Jerusalem temple. See also Harland (2003: 132-135).

15 There is evidence of this tradition of synagogue decoration in a second century CE Syrian synagogue in Dura Europa, which is now displayed in the Damascus Museum. See Schwartz, this synagogal poetry (piyyut) were primarily 'occasional pieces . . . [that] . . . strove to read synagogue art as a commemoration of Israel's place in history and not in the cosmos.' (2000: 181). See also Kimelman (1980: 165-182).

16 For example Batey (1992: 50-62); Overman (1990); Saldarini (1994); Kee (1992: 21); Edwards (1992: 54); Crossan (1998: 218-226); Freyne (1999: 161-175); Tusk (2000: 34-41); Horsley (1999: 58-65); Batey (2001: 402-409).

17 See Miller (1996: 21-27), Sepphoris was inhabited from 1550BCE, and was renamed Autocratis by Herod Antipas when establishing it as his capital in 3BCE and Diocaesarea after the Bar Kochba revolt (132-135CE). Although Antipas moved his capital to Tiberias for a brief period, Agrippa II re-established Sepphoris as the Galilean capital in the 60's CE and it continued as such for several centuries. See Josephus *Ant* 18.27.

18 See Avi Yonah 'On constante avec surprise qu'a l'époche Byzantine l'art classique profane avait pénétré non seulement dans le milieu Chretien laique fortement hellénisé, mais encore dans le milieu orthodoxe juif.' (1981: 396) These synagogues are situated at Hammat-Tiberias, Beit Alpha, Huseifa, Susiya, Na'aran, Yaphia and, most recently, Sepphoris. Hachlili notes the presence of a first century structure beneath the fourth-to-fifth century synagogue in Capernaum (1996, 97). On the other hand, some scholars such as Horsley (1996, 132-138), argue that there is no evidence of synagogues at all in Palestine/ Galilee prior to the third century CE.

19 The book of Jubilees was written in Hebrew around 160BCE and represents itself as a record of the revelation from God to Moses of the true calendar in the context of the proper observance of the Israelite festivals. (*Jubilees* 6.30-32). See the discussion of 4Q318 in Collins (1995), and VanderKam (2000: 164-167). It contrasts the solar and lunar calendars, the latter regarded as 'corrupt.'(6.36)

20 'Calendars, or writing that presuppose them, comprise a very substantial percentage of the Dead Sea caches. . . . More than any other single element, the calendar binds these works together.' The Qumran community, who relied on the sun for their calendar calculation, were in conflict with most Jews of the time who used a lunar calendar.' (Wise 1996: 297)

21 Freyne (2001: 293-294) cites Wacholder (1974: 4-21).

22 *The Antiquities of the Jews*, 3:145-146, 182; and *The Wars of the Jews* 5:217. See also *The Antiquities of the Jews* IIIvii.7, 180-187.

23 'Because lunar time cannot perfectly match solar/sidereal time (for full moon occurs every 29.5 days) the religious year had to be adjusted occasionally to keep the festivals aligned with the agricultural seasons. . .'

24 See also Westermann (1984:127).

25 Bernard Meissner, *Babylonien und Assyrien* II (1925: 110).

26 He notes also a 'Rota Ecclesiastica Übersicht' whereby the apostles, the patriarchs and the prophets are all assigned zodiacal labels.

27 The poem in its entirety uses all of the zodiac images.

28 See Harland (2003: 195-200) for a discussion on 'assimilation and acculturation' in the context of the synagogue and Imperial cults.

29 In particular Davies & Allison (1988-1997); Harrington (1991); Overman (1990); Saldarini (1994).

30 'The early Christian period was the critical bridge for the transmission of this grand "Dome of the Heaven" . . .from antiquity to the Middle Ages.'(Matthews 1993: 143, 155)

Stone Grinding Tools of the Northern Highlands of Jordan in Classical and Early Islamic Periods Case Study: Barsinia

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Abstract: The paper describes and discusses the forty-two grinding stones found during the 2006 and 2007 excavation seasons at the site of Barsinia in northern Jordan. The basic types are identified and while most of them are known from as early as the Neolithic period, one type, the rotary basalt quern, seems to be a new arrival during the Late Byzantine period.

Introduction

Ancient rural sites of the northern highlands of Jordan were equipped with facilities, such as threshing floors and presses, for the preparation of agricultural products for consumption and sale.[1] Archaeological studies in the region dealing with ancient agricultural production have mainly focused on the production and processing of two main crops, grapes and olives. The main reason for this is that the best evidence for agricultural activities lies in the structures of wine and olive presses which occur throughout the rural areas (El-Khouri 2009: 34, fig.7).[2] Accordingly, presses, their shapes and types, processes of production as well as pottery vessels that were used for associated storage have been carefully studied.[3]

Historically, the production and processing of cereals was as important as grapes and olives. Wheat and barley occupy first place amongst the winter cereals on the plains of the region, however, they are less profitable on the slopes, and tend to accelerate soil erosion. This research aims to clarify the understanding of the processing of cereals by studying types of stone vessels and tools that were made and used for this activity during the Roman, Byzantine and Early Islamic periods in the northern highlands of Jordan. Materials were collected during the first and second seasons of excavations at the rural site of Barsinia (Figure 1). The vessels and equipment were considered to be good evidence for agricultural life in rural societies. They provide evidence for the procedures used in producing cereal foodstuff. This paper sheds more light on shapes, types, function and materials of these objects.

Climate and Geography

Jordan's northern highlands separate the Jordan Valley and its margins from the plains of the eastern desert. With altitudes varying from 300 to 1250 m above sea level, the highlands receive Jordan's highest rainfall and have a generally wet and cool climate, with agro-ecological zones ranging from semi-arid to semi-humid. The northern highlands consist of dissected limestone, and contain a wide range of soil types. These are mainly clay soils and are considered the most rain-fed productive soils of Jordan. The major soils are terrae rossae or red Mediterranean soil (Rusan et al. 2005: 24-26). Lithic subgroups occur on the shallow eroded areas of the hilltops and upper slopes from which most of the residual soils have been eroded (Rusan et al. 2005: 32-34).

Modern agriculture and farming in the region is affected by several factors, primarily the shortage of fundamental resources, especially water, and the variety in climatic conditions, with hot weather during summer and freezing in winter. However, most of the area, in particular the plains around Irbid and Ramtha, is capable of yielding crops without irrigation. These plains are the major cereal producing areas in the region.

A recent study of the environment in the time of the Decapolis suggested that the agricultural productivity of the ancient fields did not differ significantly from that of modern times (Lucke et al. 2005).

Ancient Agriculture and Cereal Production

Almost all ancient villages in the northern highlands undertook two principal types of cultivation: field crops, primarily wheat, along with barley, lentils and chickpeas, and fruit, with olives, grapes and figs most important.

Agriculture was the economic base in the region, especially when ancient settlements reached their peak in Roman and Byzantine periods. During these times the population relied on crop production for economic prosperity, since agricultural produce was the most abundant commodity, or resource, available. Most of the ancient wells, pools

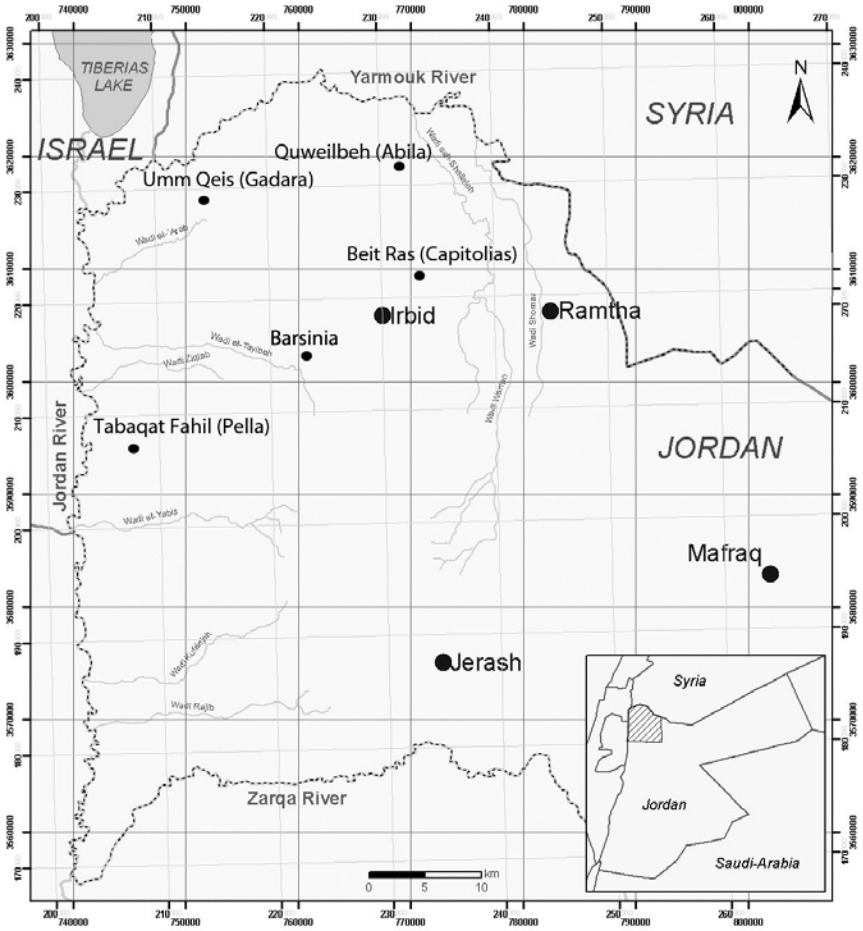

Figure 1: *Map of Barsinia and other main sites in the region of northern highlands of Jordan*

and cisterns that are still seen today were constructed by the agrarian society to develop its own flourishing agricultural and pastoral industries. The results of archaeological surveys in the region show that these installations were built in Roman and Byzantine periods,[4] but neglected in later times when sites were abandoned, especially in the Ottoman Period.

Ancient records that mention agriculture in the region are few. One of the earliest records was written by Varro (1934: 274), the Roman writer who described the region, especially the area close to Gadara, in the second half of the first century BC. According to his description the region was considered very fruitful, with seed yields as high as a hundred to one. Varro compared the region, with its fertile soil, to other regions in Italy, Syria and Africa.

Similar information was provided in the first century AD by Josephus, who described the geography and agricultural products of Peraea[5] as follows:

> *In short, if Galilee, in superficial area, must be reckoned inferior to Peraea, it must be given the preference for its abundant resources; for it is entirely under cultivation and produces crops from one end to the other, whereas Peraea, though far more extensive, is for the most part desert and rugged and too wild to bring tender fruits to maturity. However, too, there are tracts of finer soil which are productive of every species of crops; and the plains are covered with a variety of trees, olives, vine and palm being those principally cultivated. The country is watered by torrents descending from mountains and by springs which never dry up and provide sufficient moisture when the torrents dwindle in the dog-days. (BJ III.44–46)*

Such a description of soil and the agrarian nature of Peraea could be appropriate for most parts of north Palestine and the northern highlands of today's Jordan (Joseph. *BJ* II.252).

Ancient agriculture in the region could be also recognized through traces of ancient stone terraces. Contour terraces (also termed *mas□at□eb*) were constructed by placing at intervals rows of stones along the contours of a slope to inhibit soil erosion. This simple technique, which started as early as Iron Age II,[6] indicates that ancient land-use was similar to that of the present day.

Archaeological excavations in the region, such as those conducted in a number of rural sites of the Classical and Early Islamic Periods,[7] showed that the diet in the Late Roman and Byzantine periods contained only a moderate amount of meat and animal proteins, but was high in plant foods, especially wheat (el-Najjar, et al. 1999: 6; al-Shor-

Figure 2: *Silo from Hellenistic levels at Barsinia. Photo by Hussein Dibajeh*

Figure 3: *A large size oven (Tabun), found in the Umayyad context, season 2007, at Barsinia. Photo by Yousef Al-Zobi*

man 2003: 60–63; Rose & Burke 2004: 182). In addition, the excavations at Barsinia uncovered many other indications of high cereal production, such as silos[8] (Figure 2) and large ovens used mainly for baking bread[9] (Figure 3).

Archaeobotanical analysis of carbonized seeds from some of the major excavated sites in the region namely, Abila (Fuller 1987: 64), Capitolias (Lenzen & McQuitty 1989: 195; Lenzen 2002: 37–38), and Gadara (Weber 2002: 36–38), have shown the presence of olives, grapes, wild plum, berry, dates and many kinds of cereals such as barley and wheat, as well as pulses such as peas and lentils.

Grinding Stone Tools

Grinding tools used to process grain have a long tradition of production in the northern highlands. Some objects found at ancient sites in the region are comparable to tools in use until a few decades ago, with specific similarities in shape and function.

The stone assemblage on which this research is based was collected during two seasons of excavations at Barsinia. The site, located about 15 km west of the modern city of Irbid, is one of the prominent rural sites in north-western Jordan, and produced a number of stone objects with different uses. It was settled from Iron Age II until recent times; however, archaeological excavations in 2006 and 2007 established that the site flourished especially during the Hellenistic, Roman, Byzantine and Umayyad periods. The assemblage under study was found in a context dating from the first century AD to the Early Islamic periods. It provides a good sample of the main types, shapes and materials of the objects that were used at rural sites in the region.

	Locus																		
Area-Square	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
Unstr.	7																			7
A.A1																				0
A.B1						1				1										2
A.C1									1										3	4
A.D1						1	2				5	2								10
A.B2																				0
A.C2						1														1
A.A9							1	1												2
A.B9		1		3			1													5
A.B10																				0
B.A2								1												1
B.B2																				0
B.A3	1																			1
B.B3																				0
B.A4																				0
B.B4			1																	1
C.A1									1			1								2
C.A2						2				1										3
C.A3				1			1													2
C.A4									1											1
Total	8	1	1	4	0	5	5	2	3	2	5	3	0	0	0	0	0	0	3	42

Table 1: *presents the frequencies of stone objects in the various loci and areas of excavation*

Figure 4: *Courtyard at Barsinia, where grain processing took place, a rotary basalt quern and a mortar were in situ. Photo by Hussein Dibajeh*

The assemblage consists of 42 objects made of basalt and limestone. Basalt was clearly the preferred material, since it was used for all but two of the objects; the remaining two items were made of fine-grained, hard limestone. The nearest source of basalt is in the vicinity of Umm Qeis (Gadara), the Golan Heights and Galilee.

The artefacts were made in various forms, and were discovered in a variety of loci and areas of the excavation (Table 1). Some were found in situ; for example, in courtyards (Figure 4) or in small rooms (Figure 12).

Typology

Stone objects are difficult to date typologically. Their daily use necessitated durability giving them long use-lives and few dramatic changes in typology. Accordingly, the objects were dated based on their context.

Of the 42 objects in our stone assemblage, 24 were found in 2006 and 18 in 2007 (Table 2). The majority of stone objects (43%) are pestles, 28.5% are mortars and bowls, and 28.5% are grinding stones. They can be categorized into the following types according to their main shapes and functions.

1. Rotary Basalt Querns. Seven items belong to this type: five upper or hand-stones (Figure 5: 1–5; Table 2), of which only one is intact (Figure 5: 1), and two fragments of lower querns (Figure 5: 6–7). All are made of basalt, and most have naturally rough surfaces. These rotary querns could be dated to the Late Byzantine and Umayyad periods, mainly from the sixth to eighth centuries AD. They were used in pairs to grind cereals into flour. Both the upper and the lower parts were circular; usually the grinding surfaces of

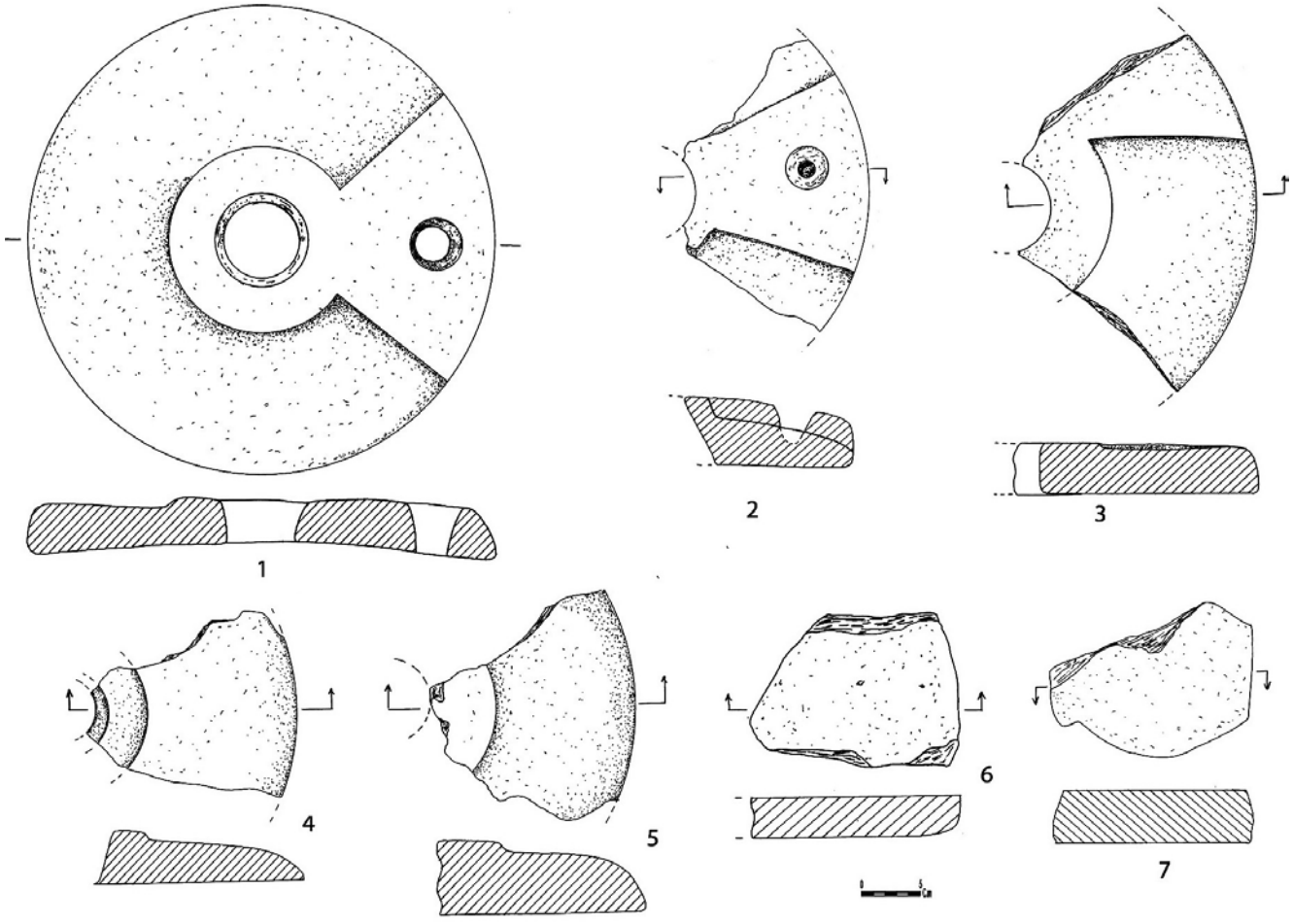

Figure 5: *Rotary basalt querns*

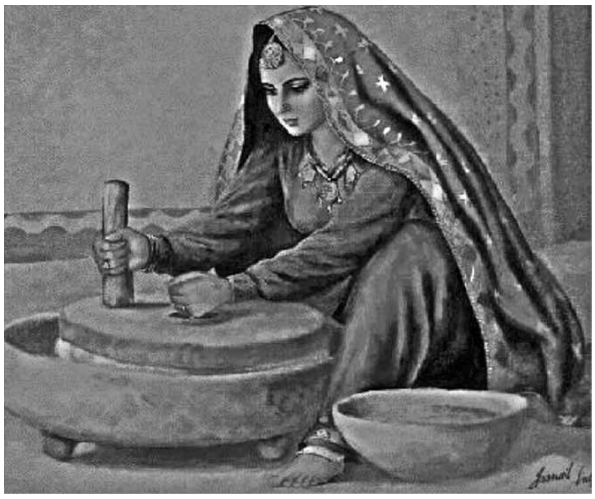

Figure 6: *Upper stone of a rotary quern, with schematic draw of a complete rotary quern, showing grain processing into flour. Photo by Hussein Dibajeh*

the upper and lower stones fit into each other. The upper stones are pierced in the centre, and have a hole at one side to allow a wooden handle to be attached (Figure 6). The thickness of the upper stone increases around the central and side holes; therefore, the central hole seems to have a small, high neck. The raw material of all fragments is very coarse and full of large pores. Both fragments of the lower stones have flat surfaces. One piece of the upper stones has slightly concave surface, but the surface in the other four pieces is flat. Diameters range between 38 and 42 cm, and thicknesses of the upper pieces range from 2.5 to 6 cm. The thickness of the two lower pieces is between 3.5 and 4.4 cm. The intact upper stone weighs 10 kg. A popular style of rotary basalt quern was still in use in northwestern Jordan until just a few years ago.

2. Grinding Slabs (Querns). A total of five pieces (Figures 7 & 8: Table 2) were retrieved, all fragmentary and made of basalt. They are usually elongated and have a protruding edge. They can be dated to the Byzantine and Umayyad periods, mainly from the fifth to the eighth centuries AD. The size and the curve of the outer face fits into the palm of the hand, where it was held during use. Cross-sections are convex or semi-triangular, and working faces are flat or slightly convex. This convexity was probably the result of use, since greater pressure is usually placed on the lateral edge of the tool.

Figure 8: *Upper- Grinding Slab (no. 8)*

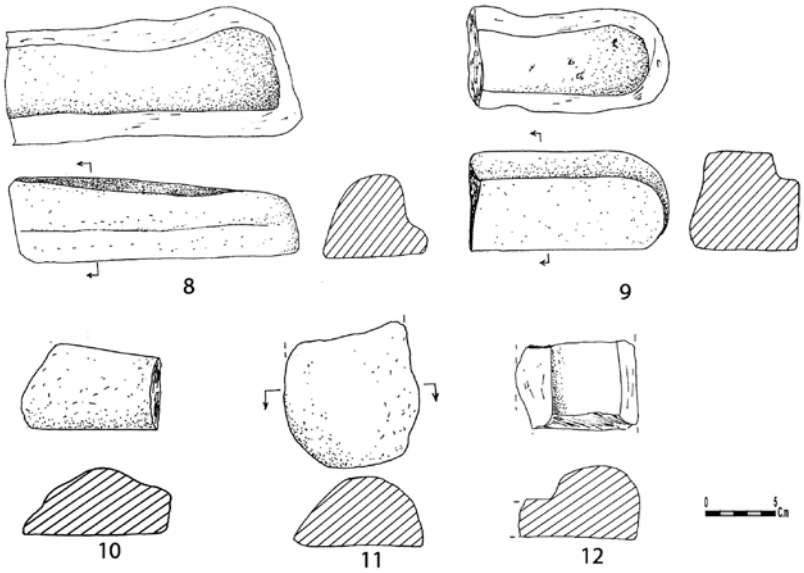

Figure 7: *Upper- Grinding Slabs*

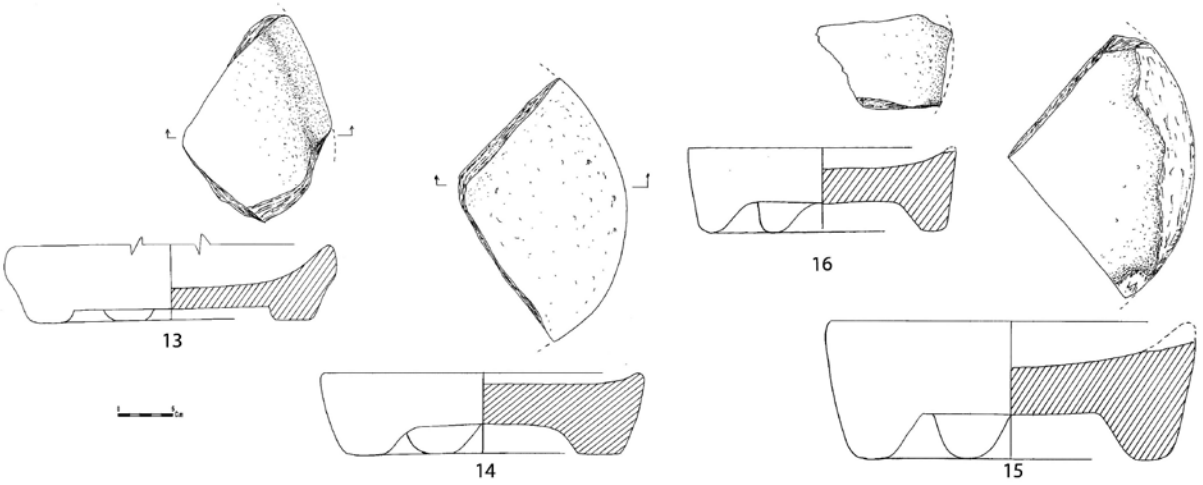

Figure 9: *Tripod Querns*

3. Tripod Querns. Four fragments of basalt tripod querns were retrieved (Figure 9:13-16; Table 2), ranging from 23 to 40 cm in diameter and 2 to 5 cm in thickness. Each piece is round and usually has three stump legs with heights between 2.4 and 4.6 cm. Leg height depends occasionally on the diameter of the mortar itself. The querns have slightly concaved polished surfaces, probably the result of use. The four querns have been dated to the period from the Late Roman to the Late Byzantine, that is from the fourth to seventh centuries AD. Similar examples were found at Hammath Teberias (Johnson 2000: fig. 26:52–53) (mortars from the Byzantine and Umayyad periods), Jerusalem (Hover 1996: fig. 27), Dor (Gut-Zilberstein 1993: fig. 6.42:11), and Jerash (Clark et al. 1986: fig. 24). Footed querns of this type are similar to mortars from Iron Age assemblages however, Iron Age mortars have higher ridge walls[10].

Figure 10: *Tripod Querns (nos. 15, 16)*

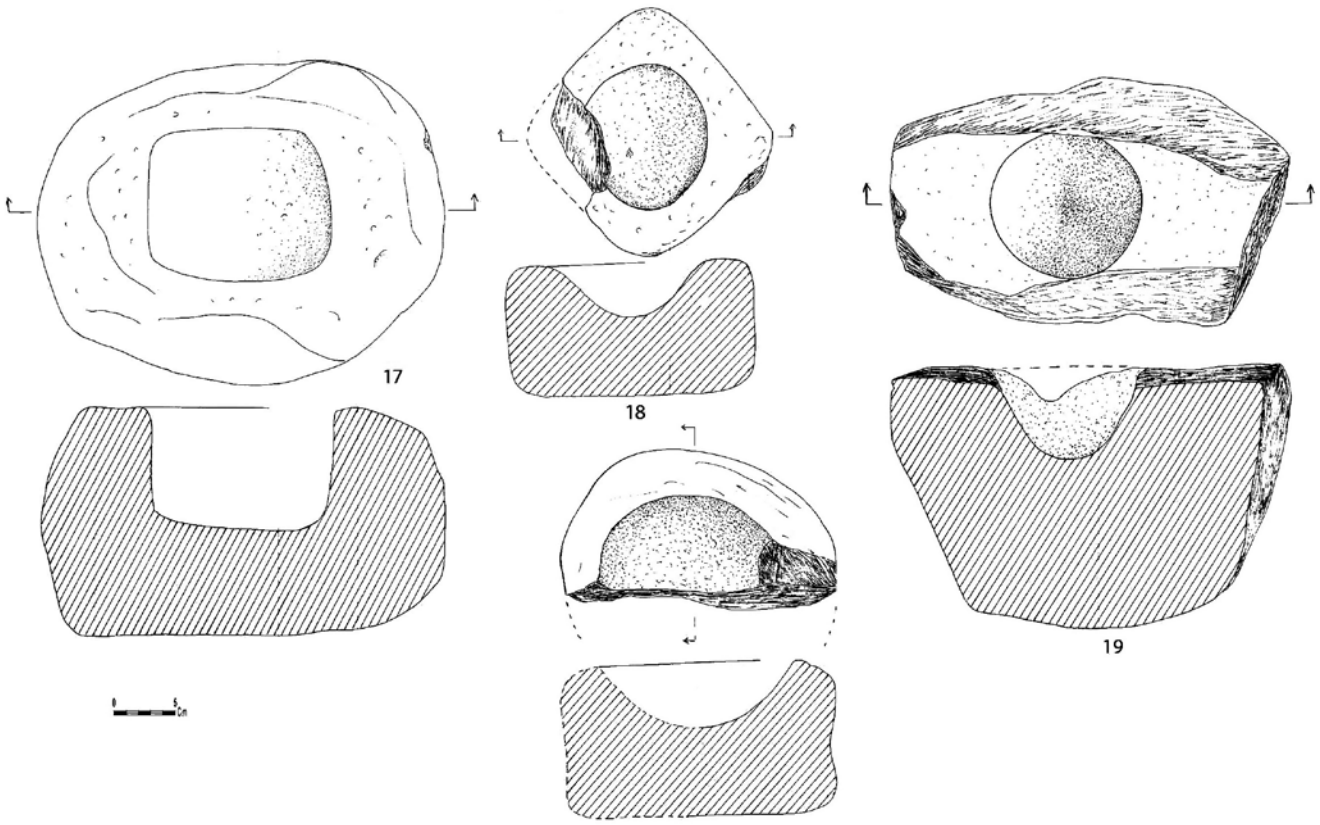

Figure 11: *Boulder mortars*

Figure 12: *Boulder mortar (no. 17) in one of the rooms at Barsinia, Area A, Sq. B1, Loc. 12. Photo by Hussein Dibajeh*

4. Boulder Mortars. Four pieces, two of which are made of basalt (Figure 11: 17,18) and two of limestone (Figure11: 19–20) (Table 2). They vary in depth from 4.5 to 10 cm, depending on the diameter of the mortar. These mortars are roughly made, and their outer surface is not well finished, but more attention was given to the inner hollow. They can be dated to the Byzantine and Early Umayyad periods, mainly from the fourth to the eighth centuries AD. The diameter of the opening is relatively small compared to the diameter of the rim, and the depth is relatively shallow compared to the height of the vessel. The base is not completely flat, and the hollow in the center is either cubic as in no.17 or hemispherical as in nos.18–20. The width of the hollow is between 12 and 15 cm, while height ranges from 11 to 19 cm. The walls and base are very thick.

Figure 13: *Boulder mortars (nos. 17, 18, 20). Photo by Hussein Dibajeh*

5. Basalt Bowls (Vessels). These vary considerably in shape (Figures 14, 15; Table 2). One bowl (Figure 14: 21) has a ring base and triangular ledge handles attached to the rim, one bowl has stumped legs (Figure 14: 22), and two bowls have flat bases (Figure 14: 23 & 24). These bowls are dated to the Late Roman and Early Byzantine periods, mainly from the third to fifth centuries AD. They are all made of basalt, and usually have nicely worked bases and rims and are highly refined compared to the deep mortars. Some vessels (Figure 14: 22 & 23) have asymmetrical

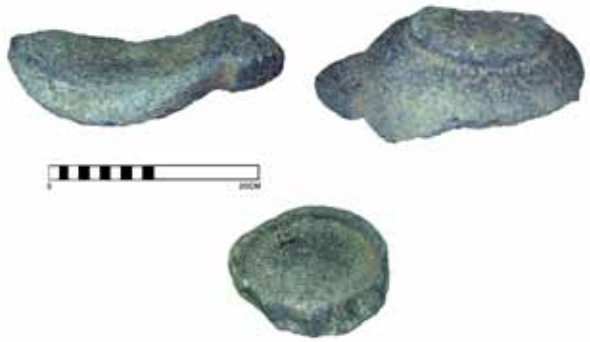

Figure 15: *Basalt bowls (vessels) (nos. 21, 22). Photo by Hussein Dibajeh*

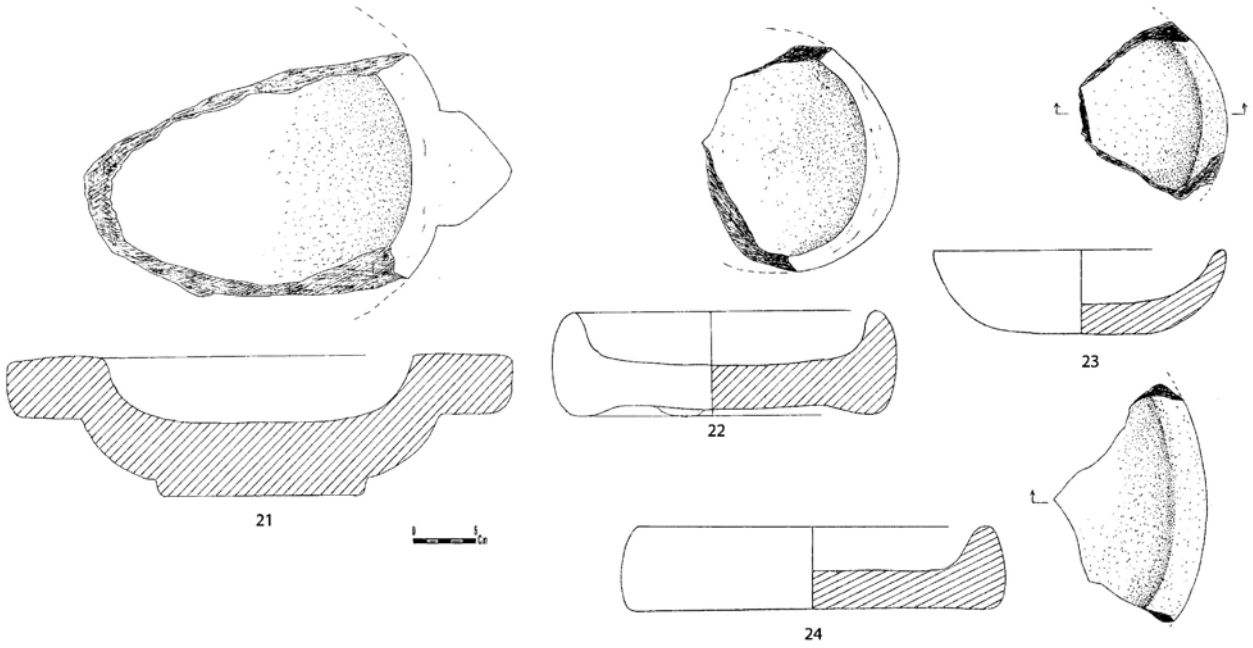

Figure 14: *Basalt bowls (vessels)*

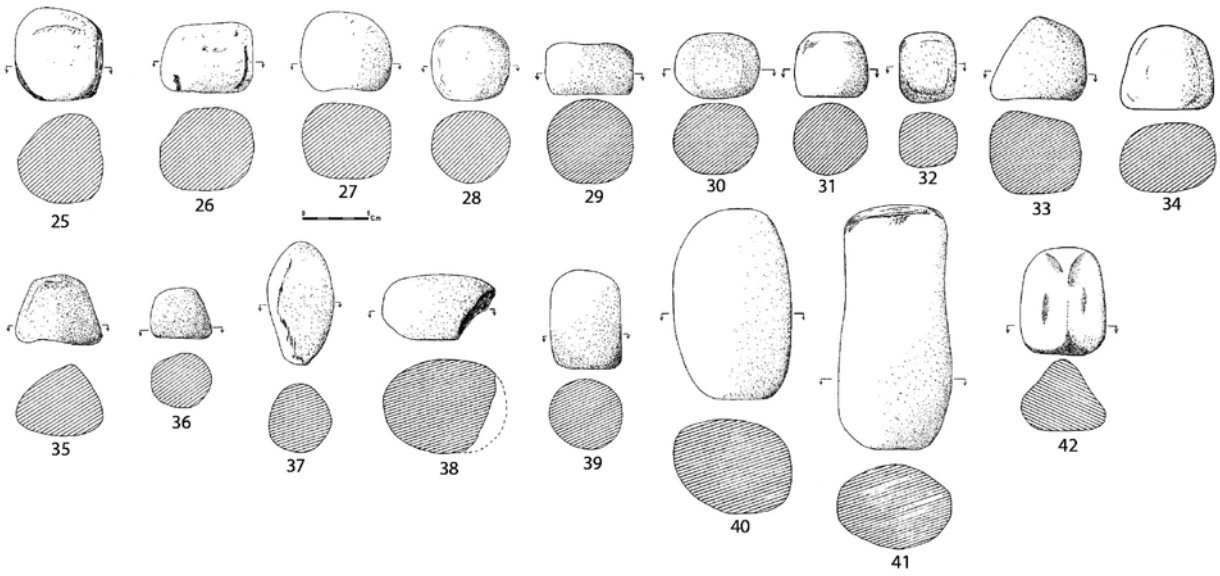

Figure 16: *Basalt pestles*

diameters or rims, and the inside of each bowl is highly polished and smoothed. Diameters are between 20 and 30 cm, while the depth of the hollows are between 4 and 5 cm. The distinction between bowl and deep mortars is determined on depth and the thickness of the base: bowls are shallow and their bases are usually of the same thickness of the bowl's wall, while deep mortars are made of large blocks of stone and have a relatively small working surface and a thick base. It appears that stone bowls, which are characterised by a somewhat larger flat working surface, were used for grinding, while mortars were probably used mainly for pounding (Ben-Ami 2005: 363). Earlier examples of stone bowls and mortars were produced as early as the Kebaran period (e.g. Ein Gev 1 and Kharaneh IV A; Stekelis and Bar-Yosef 1965: 176f; Muheisen 1988: 358; Wright 1991: 22, Table 3), and become common in the Natufian period (Wright 1991: 28). In the Bronze Age stone bowls and mortars became more popular; many examples were found at Yoqne'am, produced in the Middle and Late Bronze Ages. They were made of basalt, with simple rims; most of them are shallow and all are smooth on the interior. The most common type of base is the concave disc base (Ben-Ami 2005: 363–4). The earliest appearance of stone bowls at Yoqne'am is in MB IIC (Ben-Ami 2005: 368). A bowl similar to no. 21, but with a decorated handle, is found in Jerash (Clark et al. 1986, pl. XXXII.A).

6. Pestles. The eighteen pestles in this class are all made of basalt but have different shapes (Figure 16: 25-42 and Table 2). The most common shape is cuboid with rounded edges, others are oval or semi-rounded, conical or truncated cone, and triangular in section. Less common shapes are irregular cylindrical or elongated[11] with triangular, circular or square with rounded edges sections. The pestles are dated from the 1st century AD until the Late Umayyad period. Similar pestle shapes came from different strata showing that they were produced over at least a 600-year span without significant change in their main forms. Most pestles fit into the palm of the hand and only two pestles are large elongated with semi-rounded sections, more suitable for grinding or pounding in deep mortars (Figure 16: 40-41). Most pestles, especially the ones of the cuboid or oval shapes, have more than one working edge. The pestles weigh between 400 and 1100g and are therefore unsuitable for heavy pounding of tough materials. They sometimes have a shiny base, the result of continuous grinding and crushing of cereals and other materials against the upper surface of the stone mortar or bowl. Basalt pestles with smooth or very smooth bases were common in the Middle and Late Bronze Age. Examples of pestles similar in shape with the ones at Barsinia were found atYoqne'am[12] (Ben-Ami 2005: 366, photo V5). There, Classical pestles are elongated and cylindrical in form, while most pestles of Hellenistic – Byzantine periods are made of basalt and tend towards a squat cuboid form (Ben-Ami 2005: 364).

Concluding Comments

The grinding stone assemblages that were found in Roman – Early Islamic contexts at Barsinia showed a wide diversity of shapes. They could be categorized into basalt rotary querns, upper-grinding slabs, tripod querns, boulder mortars, basalt bowls (vessels) and pestles. Basalt was the material of preference for producing the grinding stones at the site. This may be expected as the nearest source of basalt to the site is the vicinity of Umm Qeis, only a few kilometers north of the site.

The typology of grinding stones is largely determined by their functional role; changing fashion or tradition did not affect their basic form. However, slight changes have occurred over the 12,000 year period from Neolithic to Medieval times. Forms, such as tripod mortars, boulder mortars, and bowls were in the region from the Kebaran Period but became more common in the Natufian and af-

terwards. Rotary basalt querns seemed to be a new arrival during the Late Byzantine period. Its use continued until the Late Islamic period or even until few decades ago. This technological development facilitated increased cereal production which reflects a larger population in the region.

The tripod querns show similarities to the Iron Age footed mortars, however, the main difference between both is that the Iron Aged mortars have a higher ridge walls.

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Bibliography

Ben-Ami, D. 2005 The Small Finds, in A. Ben-Tor, A. Zerzeki & S. Cohen, *Yoqne'am II- The Iron Age, Report of the Archaeological Excavations,* Qedem Reports 6, Jerusalem: Institute of Archaeology, Hebrew University.

Ben-Tor, A. 1987 The Small Finds, in A. Ben-Tor & Y. Protugali (eds.) *Tell Qiri-A Village in the Jezreel Valley*, Qedem 24, Jerusalem: The Hebrew University of Jerusalem, 236-43.

Clark, V., J. Bowsher, J. Stewart, C. Meyer & B. Falkner 1986 The Jerash North Theatre: Architecture and Archaeology 1982-1983, in F. Zayadine, *Jerash Archaeological Project 1981-1983,* Amman: Department of Antiquities, 205-303.

Davis, M. K. 1982 The Chayönu Ground Stone, in L.S. Braidwood and R.J. Braidwood (eds.) *Prehistoric Village Archaeology in South-Eastern Turkey: The Eighth Millenium B.C Site of Chayönu,* Oxford: British Reports S- 138: 73-174.

Franken, H.J. & M.L. Steiner 1990 *Excavations in Jerusalem 1961-1967, II: Iron Age Extramural Quarter on the South-East Hill,* British Academy Monographs in Archaeology 2, Oxford: Oxford University Press.

Fuller, M. 1987 *Abila of the Decapolis: a Graeco-Roman City in Transjordan*, unpublished dissertation at Washington University, St. Louis MO.

Geraty, L.T. & Ø.S. LaBianca 1985 The Local Environment and Human Food Procuring Strategies in Jordan: The Case of Tell Hesban and its Surrounding Region, in A. Hadidi (ed.), *SHAJ II,* Amman: Department of Antiquities, 323-330.

Guz-Zilberstein, B. 1995 Chapter Six: The Typology of the Hellenistic coarse Ware and Selected Loci of the Hellenistic and Roman Periods, in E. Stern *Excavations at Dor, Final Report, Volume I B, Areas A and C: the Finds,* Qedem Reports 2, Jerusalem: The Hebrew University of Jerusalem, 289-434.

Hovers, E. 1996 The Groundstone Industry, in D. Ariel & A. de-Goot (eds.) *Excavations at the city of David IV,* Qedem 35, Jerusalem: Institute of Archaeology, Hebrew University, 171-203.

Josephus, Flavius 1966 Vol. I. *The Life; Against Apion*, with an English translation by St. J. Thackeray, William Heinemann LTD. Cambridge, Massachusetts: Harvard University Press.

Josephus, Flavius 1967 Vols. II and III *The Jewish War*, Books I-III, with an English translation by St. J. Thackeray, William Heinemann LTD. Cambridge, Massachusetts: Harvard University Press.

Josephus, Flavius 1966-69 Vols. IV-IX. *Jewish Antiquities*, Books I-XX, with an English translation by St. J. Thackeray, William Heinemann LTD. Cambridge, Massachusetts: Harvard University Press.

Kamlah, J. 2000 *Der Zeraqon-Survey (1989-1994). Mit Beiträge zur Methodik und geschichtlichen Auswertung archäologischer Oberflächenuntersuchungen in Palästina,* Wiesbaden: Harrassowitz Verlag

Khouri, L. el-, W. Abu-Azizeh & T. Steimer-Herbet 2006 The West Irbid Survey (WIS) 2005, Preliminary Report, *ADAJ* 50, 121-138.

Khouri, L. el- 2007 Roman and Byzantine Settlements in the Region of West Irbid, *PEQ* 139, 3, 167-186.

Khouri, L. el- 2007 Barsinia, Archaeology in Jordan, 2006 Season, by S. Savage and D. Keller, *American Journal of Archaeology* 111, 3, 523-547.

Khouri, L. el- 2008 Roman Countryside in North-Western Jordan, *Levant,* 40,1, 1-17.

Khouri, L. el- 2008a Barsinia, the First Season of Excavation, *Newsletter* 27/28, 12-13.

Khouri, L. el- 2008b Barsinia, Archaeology in Jordan, 2007 Season by S. Savage, D. Keller & C. Tuttle, *American Journal of Archaeology* 112, 513.

Khouri, L. el- 2009 Roman Settlements in the Region of Northwest Jordan, Archaeological Studies, Land-use and Landscape Development, *AOAT 353* Münster: Ugarit Verlag.

Kirkbride, D. 1966 Five Season at the Prepottery Neolithic Village of Beidha in Jordan, *PEQ* 98, 5-61.

LaBianca, Ø. S. 1990 *Sedentarization and Nomadization: Food System Cycles at Hesban and Vicinity in Transjordan,* Berrien Springs, Michigan: Andrews University/Institute of Archaeology.

Lamon, R.S. & G.M. Shipton 1939 *Megiddo I (Season of 1925-1934): Strata I-V,* University of Chicago Oriental Institute Publications XLII, Chicago: University of Chicago Press.

Lenzen, C. 2002 Kapitolias, Die Vergessene Stadt im Norden, in A. Hoffmann & S. Kerner, *Gadara – Gerasa und die Dekapolis*, Maiz: Philipp von Zabern, 39-45.

Lenzen, C. & A. McQuitty 1989 Beit Ras, Burz (Khirbet el-) and Irbid (Tell), *AJ* 2, 193--197, 298-300.

Lucke, B., M. Schmidt, Z. Al-Saad, O. Bens & R.F. Hüttl, 2005 The Abandonment of the Decapolis Region in Northern Jordan, forced by Environmental Change, *Quarternary International* 135, 65-91.

Melhem, I. 1992 *Wine Presses at al-Yasileh: A Comparative Study,* unpublished MA Thesis, Irbid: Yarmouk University (in Arabic).

Muheisen, M. 1988 The Epipaleolithic Phases of Kharaneh IV, in A.N. Garard & H.G. Gebel (eds.) *The Prehistory of Jordan,* BAR Int. Ser. 396, Oxford, 353-367.

Najjar, M. el-, J. Rose & N. Turshan 1999 Excavation Works at the Archaeological Site of Yasileh, *Newsletter* 22, 5-7.

Rose, J. & D. Burke 2004 Sa'ad: The Place and Its People, in *Sa'ad: A Late Roman/ Byzantine Site in Northern Jordan*, Irbid: Yarmouk University Publication, 43-98.

Rusan, N., I. Zoqruti & A. Anaqreh 2005 *Geography of Jordan,* Al-Shuruq, Amman, Jordan (in Arabic).

Shorman, A. al- 2003 Byzantine Paleodiet and Social Status at Sa'ad and Yasieleh in Northern Jordan, *Athena Review. Quarterly Journal of Archaeology, History, and Exploration,* 3, 4, 60-63.

Stekelis, M. & O. Bar-Yosef 1965 Un Habitat du Paléolithique Supérieur à Ein Guev (Israel), Note Préliminaire, *L'Anthropologie* 69: 176-183.

Varro, Marcus Terentius 1934 De Re Rustica, in translation by W.D. Hooper & H.B. Ash, *Marcus Porcius Cato, on Agriculture: Marcus Terentius Varro, on Agriculture*, Loeb Classical Library, Cambridge, MA/London: Harvard University Press/W. Heinemann, Ltd.

Weber, T. 2002 *Gadara Decapolitana, Gadara/Umm Qes I,* Abhandlungen des Deutschen Palüastinavereins, Bd. 30, Wiesbaden

Wright, K. 1991 The Origin and Development of Ground Stone Assemblages in Late Pleistocene Southwest Asia, *Paléorient* 17/1: 19-45.

Yadin, Y. et al. 1958 *Hazor I: An Account of the First Season of Excavations, 1955*, Jerusalem: Magnes Press.

Yadin, Y. et al. 1960 *Hazor II: An Account of the Second Season of Excavations, 1956*, Jerusalem: Magnes Press.

Endnotes

1 References for picking and gathering grapes are found in Mat 7:16; Luke 6:44; 1; Corith 9:7; Revelation 14:18–19, gathering figs Mark 11:13; Luke 6:44; James 3:12; Revelation 6:13, planting, gathering and selling wheat Mat 3:12; 13:25–26, 30; Luke 3:17; 16:7; Revelation 18:13, producing crops, vine, olives and palm (Josephus (BJ III.44–46)), fruitful soil (Varro 1934: 274).

2 The large number of these presses in the region provides evidence for an extensive wine and olive trade either with the nearby cities or more distant areas. It is also an indication of the development of the wine industry, especially during the Late Roman and Byzantine periods (Rose and Burke 2004: 184).

3 Good examples of wine and olive presses were found at sites such as the Irbid-Beit Ras region (Lenzen 2002: 37) and in a survey by I. Melhem (1992)

4 As shown in the West Irbid Survey (el-Khouri et al. 2006), Zeiraqoun Survey (Kamlah 2000), Irbid-Beit Ras Survey (Lenzen 2002: 37), and Hisban Survey (LaBianca 1990: 236; Geraty & LaBianca 1985: 327).

5 Peraea extended in the middle of the 1st c. AD to include the north eastern part of Jordan as well

6 Gary et al, http://www.casa.arizona.edu/MPP/p119/p119.html

7 In particular the sites of S□a´ad, al-Yas□ileh and Ya'amun.

8 Two silos were uncovered, dated to the late Hellenistic periods.

9 Samples of wheat flour were collected next to the large oven at the site.

10 Ben-Tor 1987: fig. 58:2; Lamon and Shipton 1939: 14; Yadin 1958: pls. LIX: 12, 17, LXII: 5; Yadin 1960: pls. LXXVII: 2-6, CIV: 13, CXXXVI: 12

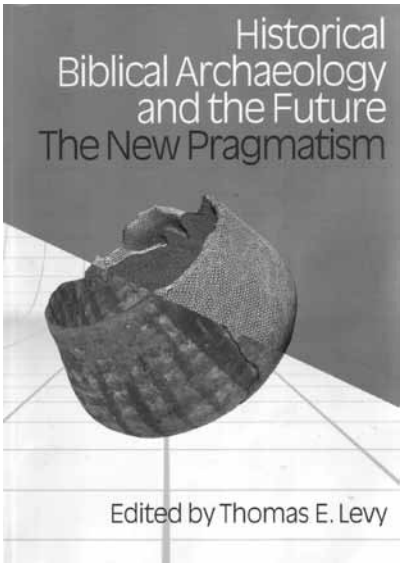
11 For examples of elongated and cylindrical pestles, see Davis (1982: fig. 3.3:4-8), Franken & Steiner (1990: figs. 2-23:5, 2-29:11, 2-35:3-5), Kirkbride (1966, fig. 7:4,6) and Lamon & Shipton (1939: pl. 106: 7-9). Polished along the whole length, or polished only on their working edges. A Persian bell-shaped pestle, see Davis (1982, fig. 3.2, 3.4:5-6) and Kirkbride (1966: fig. 7:1-3).

12 At Yoqne'am the pestles were divided into two basic groups according to their general shape. The most common from the pestle has a cylindrical or conical shape (Ben-Ami 2005: 364, fig. V.7: 13-20), and the other one is characterized by a rounded form (Ben-Ami 2005: 364, fig. V.7: 8-12). The former could be used for grinding or pounding in bowls and narrow mortars, while the latter could be used only for grinding and therefore accompanied only bowls. Conical pestles appear at Yoqne'am as early as MB IIC, while the spherical form is found mainly in LB II contexts.

Table 2: The register of the objects

Obj. No.	Reg. No.	Type	Stone	Dimensions (cm)	Discription	Date of Locus	Weight kg
1	Br.06.A.D1.10	Rotary basalt quern (Upper grinding stone)	Basalt	40 (d), 7.3 (d) of central hole, 2.2-3.6 (d) of small hole, 4.2 thick	Complete rounded upper part of a basalt grinding stone, pierced in the centre and on the side, where a wooden stick used to be fixed. Very coarse basalt, slightly concave working surface. Working surface is finer than top surface.	L-Byz - Umm	10.00
2	Br.07.0.9	Rotary basalt quern (Upper grinding stone)	Basalt	ca. 38 (d) 6 thick ca. 3.5 (d) of central hole	Flat working surface, made of coarse basalt. Small hole on side for wooden beam	Surface collection	
3	Br.06.A.D1.10	Rotary basalt quern (Upper grinding stone)	Basalt	42 (d), 3.8-4.0 thick	Very coarse basalt, with a flat working surface	L-Byz - Umm	2.50
4	Br.07.C.A1.11	Rotary basalt quern (Upper grinding stone)	Basalt	ca. 40 (d), 2.5-4.5 thick	Fragments of an upper grinding stone, with lower flat working surface. Coarse basalt. Irregular body thickness	L-Byz - Umm	1.30
5	Br.07.C.A2.5	Rotary basalt quern (Upper grinding stone)	Basalt	ca. 40 dia., 4.5-5.2 thick	Fragment of an upper grinding stone, with flat surface. Coarse basalt	Umm	1.20
6	Br.07.B.A2.7	Rotary basalt quern (Lower grinding stone)	Basalt	3.5 thick	Fragment of a lower grinding stone, with flat coarse surface. Reshaped	L-Byz - Umm	0.40
7	Br.07.C.A3.6	Rotary basalt quern (Lower grinding stone)	Basalt	4.4 thick	Fragment of a lower grinding stone, with flat surface. Traces of use on both sides	L-Byz - Umm	1.00
8	Br.06.A.C2.5	Longitude upper grinding slab	Basalt	8.5 - 10 (w), 22.6 (l) (broken), estimated whole (l) ca. 34	Fragment of upper longitude grinding stone. Made of very coarse basalt	Byz (5th c)	1.90
9	Br.06.A.B9.1	Longitude upper grinding slab	Basalt	14.5 (l) x 7.8 (w) x 6.7 thick	Fragment of upper grinding stone, with flat surface	L-Umm	1.10
10	Br.07.C.A2.5	Longitude upper grinding slab	Basalt	9.8 (w) x 4.8 (h) x 8 (h) (broken)	Fragment of upper grinding stone, with flat surface. made of coarse basalt	Umm	
11	Br.07.C.A3.3	Longitude upper grinding slab	Basalt	10 (l) x 10 (w) (broken) x 5 thick	Fragment of upper grinding stone, with flat coarse surface. Made of coarse basalt	L-Byz - Umm	0.70
12	Br.07.C.A2.9	Longitude upper grinding slab	Basalt	5.5 thick	Fragment of an upper longitude grinding basalt stone with coarse flat surface	L-Byz - Umm	0.40
13	Br.07.0.4	Tripod quern	Basalt	8 (h), 2 thick, foot (h) 2.4	Shallow mortar, with rounded polished interior surface. Broken side. Small foot (stump leg). Small protruding notch on upper edge on the foot side.	Surface collection	2.00
14	Br.07.0.6	Tripod quern	Basalt	30 x 9.5 (h), 4.6 thick, ca. 36 (d), foot: 8 (w) x 3.2 (h) x 5 (l)	Fragment of rounded shallow grinding vessel with smooth interior	Surface collection	6.00
15	Br.06.A.C1.8	Tripod quern	Basalt	ca. 36 (d), 5 thick, 12 (h), 4.6 foot (h)	Fragment of basalt circular mortar, with small foot at the side and smooth working flat surface. Broken rim	Byz. (4th-6th century)	4.20
16	Br.06.A.B1.5	Tripod quern	Basalt	23 (d) 3.5 thick, 8 (h) foot 2.8 high	Fragment of basalt mortar with rounded leg at a side	Umm (7th century)	0.95
17	Br.06.A.B1.9	Boulder mortar	Basalt	26.5 (l) x 33 (w) x 18.5 (h), central perforation: 15 x 12.5 x 10 (h)	Deep grinding mortar made of very coarse basalt. Rounded roughly dressed exterior walls and falt bottom	Byz. (4th-6th century)	18.00
18	Br.07.0.1	Boulder mortar	Basalt	20 (d), 11 (h), perforation: 6 (d)	Deep basalt mortar with rounded thick and roughly dressed exterior walls, polished interior surface. Parts of exterior walls are broken. Irrigular base. Made of coarse basalt	Surface collection	4.00
19	Br.06.A.D1.10	Boulder mortar	Limestone	19 (w) x 32 (l)x 21 (h), 12 (d) x 7.5 depth of inside hole	Deep mortar, with rounded thick and roughly dressed exterior walls, polished interior surface. Broken sides	L-Byz - Umm (6th-8th century)	17.00
20	Br.07.0.4?	Boulder mortar	Limestone	21.4 (d), 12.5 (h), 5 depth	Fragment of deep mortar. Smooth inside, uneven walls outside, uneven flat base.	Surface collection	4.90
21	Br.07.0.2	Bowl	Basalt	39 complete width with handle, 29 outer dia, 24 inner dia.	Shallow bowl with protruding small triangular lug handle (ledge handle). Smooth surface	Surface collection	4.80
22	Br.06.A.D1.11	Bowl	Basalt	ca. 17 (d), 9 (h), 4.4 (thick)	Fragment of shallow semi rounded basalt bowl, with thin walls, and thick base. Smooth interior surface. One small foot	Byz. (4th-5th century)	2.00
23	Br.06.A.D1.11	Bowl	Basalt	ca. 22 (d), 7.5 (h) x 2.5 (thick)	Fragment of shallow bowl, with rounded roughly dressed exterior walls, polished interior surface, and flat base	Byz. (4th-5th century)	0.80
24	Br.06.A.C1.18	Bowl	Basalt	40 (d), 6.3 (h), 3.8 (thick)	Fragment of shallow basalt bowl, with thick short walls, flat base, and smooth interior surface	3rd-4th century AD	1.20
25	Br.06.A.B9.3(2)	Pestle	Basalt	7.1 (h) x 6.8 (w) x 6.7 (l)	Intact conical with flat apex, and polished bottom surface. Made of smooth basalt. Traces of use on three sides	L-Byz - Umm	
26	Br.06.A.B9.3 (3)	Pestle	Basalt	7.2 x 6.2 x 5.4	Intact pestle, traces of use on one side	L-Byz - Umm	
27	Br.06.A.D1.10	Pestle	Basalt	6 x 7 x 6 (h)	Intact rounded basalt pestle. Traces of use, on concave surface	L-Byz - Umm	
28	Br.07.B.A3.0 (1)	Pestle	Basalt	5.8 x 5.8 x 5.3	Intact rounded basalt pestle. Smooth surface. Traces of use on all	Top soil collection	
29	Br.06.A.D1.6 (2)	Pestle	Basalt	4 (h) x 6.7 x 6.7	Intact rounded basalt pestle, highly polished and one flat surface. Traces of use on both lower and upper surfaces.	After L-Umm	
30	Br.07.C.A1.8	Pestle	Basalt	6.6 x 5.5 x 5.1	Intact basalt pestle with smooth surface	1st-2nd c pottery lamp, reused?	
31	Br.06.A.B9.6	Pestle	Basalt	5.5 x 5.5 x 5 (h)	Intact basalt pestle, with smooth surface and flat base	R 3rd c	
32	Br.06.A.A9.6 (2)	Pestle	Basalt	5.5 (h) x 3.5 x 3.5	Roughly rounded basalt pestle	R 3rd c	
33	Br.06.A.D1.10 (2)	Pestle	Basalt	6.7 x 7.5 x 6.5 (h)	Intact rounded basalt pestle. Made of coarse basalt. Traces of use on lower surface.	L-Byz - Umm	
34	Br.06.A.C1.18 (1)	Pestle	Basalt	6.3 x 5.6 (h) x 4.6	Conical shape pestle with flat base and smooth surface. Traces of use on two surfaces	ER ESA pottery	
35	Br.06.A.B9.3 (1)	Pestle	Basalt	5 (h) x 6 x 4.8	Intact conical pestle with flat apex, and polished bottom surface. Made of smooth basalt. Traces of use on three sides. Triangular	L-Byz - Umm	
36	Br.06.A.C1.18	Pestle	Basalt	3.8 (h) x 4.6 x 4.2	Conical shaped pestle, rounded section, traces of use on one	ER ESA pottery	
37	Br.07.B.B4.2	Pestle, elongated?	Basalt	9.3 (h) x 5.2 x 4.3	Intact pestle, with smooth surface. Maybe used as polishing or rubbing stone as well	Umm	
38	Br.06.A.A9.7a	Pestle	Basalt	5 (h) x 8.7 x 7.1	Pestle with broken side, opposite surfaces are flat, highly polished. Traces of use on both sides	ER 1st c BC	
39	Br.06.A.B1.5	Pestle, elongated	Basalt	7.5 (h) x 5.5 x 5.8	Pestle with smooth surface. Traces of use on both surfaces. Made of smooth basalt	Umm 7th c pottery lamp	
40	Br.06.A.D1.6 (1)	Pestle, elongated	Basalt	9.2 x 7 x 14.5 (h)	Intact roughly rounded and polished pestle, made of smooth basalt. Traces of use on lower surface	post L-Umm	
41	Br.07.0.8	Pestle, Elongated	Basalt	19 (h) x 9 x 6.5	Intact pestle, with smooth surface. Traces of use on one side	Surface collection	1.80
42	Br.07.C.A4.8	Pestle	Basalt	8.2 (h) x 6 x 6.1	Triangular section, traces of use on all sides, smooth convex	L-Byz - Umm	

Book Review



Historical Biblical Archaeology and the Future: The New Pragmatism,
edited by Thomas E Levy, 2010, London and Oakville: Equinox, pp xvi & 375, ISBN 978-1845532581, USD 40.

Christopher J. Davey

Professor Thomas E. Levy, Norma Kershaw Chair in the Archaeology of Ancient Israel and Neighbouring Lands, University of California, San Diego, has already contributed a couple of valuable books including *The archaeology of society in the Holy Land* (Continuum, 1998) and *The Bible and Radiocarbon Dating* (Equinox, 2005). This volume of papers continues the theme of the latter arguing that the application of scientific recording and analyses seen in historical archaeology elsewhere in the world has the potential to make Biblical Archaeology relevant again. Biblical scholars such as Thomas L Thompson have claimed that archaeology can tell us nothing and many German scholars have simply ignored it altogether.

The occasion for the book was the establishment of the Norma Kershaw Endowed Chair in the Archaeology of Ancient Israel and Neighbouring Lands at the University of California, San Diego, Judaic Studies Program. Interestingly, the holder of the chair must have experience in the archaeology of ancient Israel and one of its neighbours.

Science to the rescue

Levy sets the scene in the first chapter entitled 'The New Pragmatism: Integrating Anthropological, Digital, and Historical Biblical Archaeologies'. He briefly traces the demise of Biblical Archaeology and discusses geographical terminology deciding 'the Levant' is preferable to 'Syro-Palestine' because it is culturally and politically neutral. He discusses the idea of 'pragmatism' which is derived from some recent American philosophers and which 'views the truth of a proposition or idea in its observable consequences' (9). The approach emphasises compromise and incremental solutions over grand visions and 'authoritarianism/dogma/ideology/fundamentalism'. Levy takes up Dever's call for Biblical Archaeology to be more inclusive and less loaded with ideology. This is the intention of the book. Levy says that to make historical Biblical Archaeology work:-

> *we need to find ways collectively to harness the scholarly communities interested in historical Biblical Archaeology (archaeology, biblical studies, scientific analytical fields, telecommunications and information technology); funding resources; the possibility of re-establishing historical Biblical Archaeology as an important intellectual resource for societies especially interested in Abrahamic tradition; and the tradition of archaeology as a consumer, user, and innovator interested in testing new theories and methods for research* (9).

Interestingly Levy is critical of ASOR for leaving public Biblical Archaeology to the Biblical Archaeology Society. If his archaeological horizon began before Albright he may be less concerned, however he is taking a positive step to propose a solution by means of the application of rigorous methodologies to produce the 'most parsimonious explanation' of the data.

Archaeology may be seen here to be returning to its roots. Robert Wood, John Gardner Wilkinson, Johannes Ludwig Burckhardt, Edward Robinson, William Matthew Flinders Petrie and many others went out to measure and accurately record what they found using the best available equipment. Problems arose when their work became embroiled in the higher criticism debate where it was called upon to contribute evidence beyond its capacity to do so. This book however is based on American archaeological experience and makes little reference to anything prior to Albright.

In modern terms Levy is advocating the adoption of processual archaeology. While archaeologists elsewhere in the Near East adopted this methodology long ago, Israeli archaeology still seems to be dominated by a culture history structure. The current projects employing up-to-date scientific analysis and technology listed by Levy include:-

- Brown University, Computer Vision Research: Promoting Paradigm Shifts in Archaeology, $2.6m,
- University of Bergen, Global Movements in the Levant Project, $2.4 m,
- Euro project, Reconstructing Ancient (Biblical) Israel: The Exact and Life Sciences Perspective, $5m, and
- a number of Californian based imaging and digital data projects.

Levy devotes the remainder of his paper to the development and application of digital recording of excavations and artefacts, and radiocarbon dating, beginning with a description of excavation practice applied by him at Khirbet

en-Nahas, Jordan. He is right that digital recording using GPS systems and GIS software is the future of excavation recording. The sizes of field computers and the equipment costs are significant issues now for archaeologists.

The radiocarbon dating discussion focuses on the progress of calibration and advocates the use of IntCal04 calibration curve for the southern Levant. Again the application of radiocarbon to Khirbet en-Nahas is described. Previous archaeological excavation has led to the conclusion that the area of ancient Edom was not settled before the seventh century BC, but Khirbet en-Nahas is revealing a fairly continuous occupation from the Late Bronze Age into the Iron Age. The absolute dates obtained from radiocarbon analyses reduce the opportunities for uncertainty.

There is a certain mystery in this book with respect to the identity of Biblical Archaeology. While its history and demise is explained in terms of the Biblical Archaeology understood by such people as G. Ernest Wright, in fact what is meant here seems to be Israeli archaeology of the Iron Age. Levy believes that Biblical Archaeology, one assumes Israeli archaeology, should become 'more inclusive and less laden with ideology' (9). While he personally has some ties with non-Israelis, the fact is, this book barely mentions non-Israeli activity. Miroslav Barta's chapter entitled ''Biblical Archaeology' and Egyptology: Old and Middle Kingdom Perspective' is an exception. A discussion about the ideology to be discarded by Israeli archaeology can not be found in the book.

Ethnicity and Israel

Two papers by Prof Shlomo Bunimovitz, Tel Aviv University, and Avraham Faust, Bar-Ilan University, deal with the identification of ancient Israel in the archaeological record. They express the view that it was the archaeological surveys undertaken in the Occupied Territories after the Six-day War that brought about the change in Israeli Biblical Archaeology. Supposedly this work 'liberated' archaeology from the biblical agenda. The claim is surprising as Finkelstein's publication of his surveys and excavation in the Occupied Territories, *The Archaeology of the Period of Settlement and Judges* (1988), was entirely biblically defined as the title would suggest.

Finkelstein's Israelite attributes were claimed to be the four-roomed house and the collared-rim storage jar, however as Faust acknowledges (59) the Jordanian archaeologist, Moawiyah Ibrahim, had shown a decade prior to Finkelstein's work that these features had a distribution well beyond the Occupied Territories. The only trait now accepted to be Israelite is the absence of pig bones, and even that seems to be fairly tenuous given that the contrasting data is derived mainly from one area, which is assigned to the Philistines.

A paper by Assaf Yasur-Landau, University of Haifa, discusses the four-roomed house and the archaeology of households in a paper entitled 'Under the Shadow of the Four-Roomed House'. He also deals with the contrasting Philistine domestic archaeology and then asks why have archaeologist not identified a typical Canaanite house; there is certainly no lack of data. The answer seems to be that the data from second millennium domestic dwellings is not precise enough to be meaningful.

Faust acknowledges that the term 'Israelite' has been abandoned by many archaeologists because they have not been able to identify the archaeological attributes of the various Canaanite ethnicities. He is sanguine about a solution to the problem because of the extremely large database available, but he makes no comment about its quality; it is in fact unlikely that archaeological records are precise enough to reliably learn about family structure, wealth, economic structure, gender and so on.

A paper entitled 'Biblical Archaeology as Social Action' by David Ilan, Director of the Nelson Glueck School of Biblical Archaeology, Jerusalem, describes two community archaeology projects. One involves students from the city of Modi'in and a nearby site of Givat Sher, which is said to have been occupied from the time of the Maccabees. The aim is to develop community 'political sophistication' by instilling the realisation of the long period of occupation of the land on which they now live.

The second project is at Tel Dan where it is hoped that Israeli Palestinians will learn to co-exist with Israeli Jews. We are told that this dig 'addresses directly the source of the conflict in the Middle East between Israel and the Arabs' (78). How Tel Dan, which had only a comparatively short-term Israelite presence, does this is not explained. An archaeological investigation of the remains of nearby Palestinian villages on Highway 99, the road to Tel Dan, such as *al-Khisas* and *al-Manshiyya*, ethnically cleansed in May 1948, may offer a more promising starting point for such an understanding.

The promoters are right to believe that 'archaeology can give a more nuanced, long-term perspective of their place in the land and history' (78), however, until Israel itself comes to grips with the issues raised by Shlomo Sand, *The Invention of the Jewish People* (trans. Yael Lotan; London & New York: Verso, 2009) and the archaeological indeterminacy of Israelite ethnicity, it is unlikely that they have very much to impart to the indigenous people of Palestine. Ilan hopes that archaeology may contribute positively to group solidarity and counter the negative forms of group solidarity that draw on chauvinism, racism and nationalism (79). There is a strong hint throughout this paper that it is young Israelis and Israeli-Palestinians who need to re-orientate their perspective; the fact is they did not create the current political situation.

The future of Biblical Archaeology

In a paper entitled 'The Archaeology of the Levant in North America' Aaron Burke, Assistant Professor of Archaeology of Ancient Israel and the Levant, University of California, Los Angeles, surveys the current American involvement in Levantine archaeology by listing the relevant academic

teaching positions and field work; the list is much shorter than one might have expected. He believes that while most dissertations allude to 'Israel' or 'Canaan', it is only a consideration of the northern Levant that will enable broader historical questions to be addressed (83). He also advocates the use of 'Levantine' rather than 'Syro-Palestinian' to describe the discipline once called 'Biblical Archaeology', which in this case may not mean Israeli archaeology.

Burke's comment that it is only recently 'for the first time' that the largest excavations may be in the north of the Levant, rather than the south, displays a complete lack of knowledge of the history of the archaeology of Lebanon, Syria and southern Turkey (91). His concern that Levantine Archaeology may not be as attractive as Biblical Archaeology also reveals a failure to appreciate its richness. There are numerous Americans involved in archaeology in Syria, but none are mentioned here. It seems that the contributors to this book are generally unaware of the massive amount of archaeology being conducted elsewhere in the Levant and instead see it as a vacant field which they can usurp with a name change.

Applied Pragmatism

There are six papers offered to illustrate the idea of pragmatism. Czech Egyptologist Miroslav Bárta discusses the Egyptian Old and Middle Kingdom in a paper entitled ''Biblical Archaeology' and Egyptology'. He focuses on Egyptian Old Kingdom trade and other relations with the Levant. The Middle Kingdom discussion focuses on the story of Sinuhe and the influx of people from the Levant into Egypt. Bárta briefly mentions the excavations at Tell el-Dab'a and Tell el-Borg. These excavations used rigorous scientific methods, have direct relationships with the Levant and have biblical ramifications. They represent archaeological pragmatism superior to anything offered in this book and the omission of any serious consideration of them is strange.

A detailed analysis of two intramural burials from Late Bronze Age Ashkelon is presented by Aaron Brody in a paper entitled 'New Perspectives on Levantine Mortuary Ritual'. Brody, who is Robert and Kathryn Riddell Associate Professor of Bible and Archaeology and Director of the Badè Museum, Pacific School of Religion, Berkley, carefully uses stratigraphic data and Ugaritic texts to propose burial rituals, which he contrasts with the ritual proposed by Professor Manfred Bietak for Middle Bronze tombs at Tell el-Dab'a.

Ann Killebrew is Associate Professor of Classics and Ancient Mediterranean Studies and History, Jewish Studies and Anthropology, Pennsylvania State University. Her paper 'The Philistines and their Material Culture in Context' summarises our present knowledge of the Philistines and questions the traditional theories about their origins. She canvasses the range of approaches that may be explored. This is a helpful assessment of current thinking.

Eveline van der Steen's paper, 'Judha, Masos and Hayil' describes the recent history and traditions of the Ibn Rashid emirate and suggests that it offers some models to understand the formation of the Israelite kingdom. Dr van der Steen is at the University of Liverpool. The contribution is useful and refreshing. Post-processual archaeology is based on this type of research. The phenomenon of Khirbet Qieyafa, is not considered and there is no discussion of any possibility of nomadic tribal involvement in copper mining and smelting technology, although she does address trade issues. A second study in the paper considers the formation and transformation of oral tradition in tribal society and the biblical stories of King David.

The application section concludes with a paper 'The Four Pillars of the Iron Age Low Chronology' by Daniel Frese and Thomas Levy. This is also a handy summary of the issues. A footnote acknowledges that Finkelstein 'may have softened his position' (187) on the date of the Iron I-II transition. In fact at the 2010 Society of Biblical Literature meeting in Atlanta Finkelstein adopted 950 BC, rather than 920 BC, as beginning of Iron Age II, thus halving the difference between high and low chronologies. The issue has now largely dissipated. The paper also makes practical comments about the recent history of radiocarbon dating in relation to the Iron Age in Israel.

The problem with texts

An adoption of processual methodology will inevitably create a tension with textual material. In this book however it seems to be implied that texts should be part of the scientific analysis, but it is not actually stated that texts are artefacts and should be subjected to similar processes of investigation and interpretation.

The section about texts begins with a paper entitled 'Towards an Anthropological Methodology for Incorporating Texts and Archaeology' by Tara Carter and Thomas Levy. This paper uses Icelandic Sagas to explore the relationship between history, anthropology and archaeology. By focussing on the status of women in the Icelandic Sagas the paper aims to demonstrate that a 'meaningful glimpse of ancient societies' can be obtained and that the maximalist-minimalist debate by contrast has reached a dead end. This is certainly correct. The authors general assumption that the Hebrew Bible is a post-exilic text however is contestable as demonstrated by the following paper.

William M. Schniedewind, Kershaw Chair of Ancient Eastern Mediterranean Studies, Professor of Biblical Studies & Northwest Semitic Languages, University of California, Los Angeles, discusses the issue of the Solomonic gates in a paper entitled 'Excavating the Text of 1 Kings 9'. He sets the scene in the first sentence by calling many 'historical reconstructions' and 'dismissals of historicity' 'naïve' (241); the reviewer would feel more comfortable with the term 'superficial'. After commenting on the rhetorical position of Finkelstein on the subject, Schniedewind demonstrates that 1 Kings 9 was originally a text cataloguing Solomon's

building activity and that a subsequent writer inserted additional comment about Solomon's unsatisfactory dealings with foreigners concerning gold, horses and wives. There is, he says, 'no *a priori* reason to dismiss a 10th century date' for the original text (248). He also draws attention to the absence of any serious comment in the archaeological literature about the last three cities mentioned in the list of building activity, Lower Beth-Horon, Baalath and Tamar, implying that dogmatic theories about the United Monarchy are premature.

In a paper 'Culture, Memory, and History' Ronald Hendel, Norma and Sam Dabby Professor of Hebrew Bible and Jewish Studies in the Department of Near Eastern Studies of the University of California, Berkeley, explores the role of the biblical scholar in relation to history, with the warning that this is work in progress. He begins by referring to Spinoza's distinction between the truth and meaning of ancient writings and after discussion maintains that the historical-critical method is far from dead. He may be right, but whether it has any relevance outside academia is questionable. The paper concludes with a favourable reference to Halpern's suggestion that history in ancient Israel begins with the all-Israel ceremony at Shechem (Joshua 24).

Baruch Halpern, Chaiken Family Chair in Jewish Studies; Professor of Ancient History, Classics and Ancient Mediterranean Studies, and Religious Studies, Pennsylvania State University, provides a moderately detailed description of the history of the Levant in the mid-10th to mid- 8th centuries BC in a paper entitled 'Archaeology, the Bible and History'. He concludes that 'concerning public events, Kings [ie the Book of] is reasonably robust' (271). Papers like this are satisfying to read as we see a scholar opining on all available evidence to reach an understanding of the inter-play between power and politics of the 9th century BC Levant.

Jodi Magness, holds a senior endowed chair in the Department of Religious Studies at the University of North Carolina at Chapel Hill: the Kenan Distinguished Professor for Teaching Excellence in Early Judaism. Her paper, 'Integrating Archaeology and Texts', discusses the toilet found by De Vaux in the Qumran complex and the texts dealing with defecation. By comparison with the Romans, Jews seem to be coy about the process. Interestingly, Magness does not reference the paper by F. Joe E. Zias, James D. Tabor, Stephanie Harter-Lailheugue, Toilets at Qumran, the Essenes, and the Scrolls: New Anthropological Data and Old Theories, *Revue de Qumran,* 22.4 2006, 631-640, that discusses the defecation area outside the settlement. The Zais *et al* paper is a rigorous application of scientific archaeology that precisely illustrates the approach advocated by Levy.

Back to Biblical Archaeology

The last and shortest section of the book entitled, In Perspective, has six contributions. Dr Aren Maeir, Bar-Ilan University and excavator of Tell es-Safi, writes under the sub-title 'How I Lost my Fear of Biblical Archaeology and Started Enjoying It'. This is not a very good paper. He belittles the 'Bibel und Babel' controversy as 'simplistic' and portrays the Palestine Exploration Fund as a Bible 'proving' organisation because of the reference in its aims to 'biblical illustration'. His failure to understand the debates of the past leads him to repeat the mistakes. Maeir argues that Biblical Archaeology should embrace all periods from prehistory until Byzantine, all regions from Persia to Rome and that it should be a field excavation activity seen as distinct from the past because it is now a 'scientific endeavour' (301). It may be true that Israeli archaeology is now becoming scientific, but the fact is, that most other forms always were. The Palestine Exploration Fund, for example, used the best scientific equipment available at the time. It was this fact that prevented it from working jointly with the amateurish 'Bible proving' American Palestine Exploration Society in the 1870's survey of Palestine. Maeir has his eye on public perception where Biblical Archaeology still has some attraction. That may be the case, but as an academic discipline Maeir's Biblical Archaeology has very little going for it and finds itself at odds with the last paper in this section by William Dever.

Richard Elliott Friedman, Ann and Jay Davis Professor of Jewish Studies at the University of Georgia, in a paper entitled 'A Bible Scholar in the City of David' also advocates the retention of the title 'Biblical Archaeology'. The paper imparts a few personal anecdotes about his experience as a conservative biblical scholar observing Israeli archaeological excavations over the last thirty years. He mentions Aharoni's Arad temple excavation without acknowledging that Aharoni's *a priori* assumptions led him to dig so carelessly that we now have little idea about the date or significance of this important structure. This is the reason why biblical archaeologists should not apply their discipline in the field, they come with restrictive agendas and they are unable to give all the material they find due attention.

The paper by David Goodblatt, Professor of History and Endowed Chair in Judaic Studies, University of California, San Diego, 'Books and Stones and Ancient Jewish History' will elicit groans from archaeologists because he argues that without texts such as Josephus, we would be unaware that there was a Jewish temple in Jerusalem, implying that results from archaeology can be very limited. Jodi Magness, in a second paper 'The Archaeology of Palestine in the Post-Biblical Period' takes issue with those who would try to interpret Qumran independently of the scrolls. The role of textual material is better discussed in the context of post-processualism, which is not the context of this collection of papers.

Magness' main issue, however, is the lack of archaeology available in American institutions that is 'post-biblical' meaning post 586 BC. She laments the American practice of incorporating archaeology into related departments and not into Institutes or Departments of Archaeology.

Alexander Joffe, Research Scholar at the Institute for Jewish & Community Research, continues Magness' bleak assessment. He is only concerned with Israeli archaeology of the Iron Age. The reason why it has lost its popularity according to Joffe is its 'clash of parochialisms, egos, and unrealistic expectations' (343). This is no doubt correct, but it is only part of the story. Israeli archaeology is an integral part of the State, and while Australians may be blissfully unaware, much of the world's population is disenchanted with the actions of modern Israel. Biblical Archaeology is seriously implicated in this situation. Some public statements by the publisher of this journal prior to 1970 are a case in point. Joffe's assessment of the status of archaeology as viewed by different Middle Eastern political and religious groups is interesting and rather depressing.

The last word is left to William Dever, 'Does 'Biblical Archaeology' have a future?'. Dever seems to think so, but he offers a few words of warning. He points out that Biblical Archaeology is primarily promoted by Christians, not Jews and he makes a number of serious criticisms of Iron Age archaeology in Israel. The declining American funding for archaeology is a concern for him, as it is for the preceding authors, and he commends the commitment of the Adventist and Southern Baptist communities who continue to fund serious archaeological excavations.

Summing up

The excitement with which I began reading this book had dissipated by the end with feelings of disappointment as it became clear that the core issues involve Israeli archaeology. There was a feeling of claustrophobia; so many problems have long been dealt with elsewhere. Excavating permits in other Middle Eastern countries from the 1920's, for example, required the nomination of an epigraphist, together with a surveyor and conservationist to be part of archaeological teams. Texts are an integral part of the archaeological process outside Israel.

When Israel jettisoned the Mandate archaeological jurisdiction in 1948 it set out on a path that has led to the current situation where minimalist biblical scholars can deride its results without fear of a reliable evidence based rejoinder. Dever refers to the problem of personality cult in Israeli archaeology, but without it there would be no groupies and no public interest or media support. Slick presentation is all that is left.

Elsewhere archaeologists are facing the challenges of post-processualism. As Faust notes Israeli archaeology is still dominated by culture history methodologies; some papers in this book advocate a processual approach, a method developed elsewhere forty years ago.

Israeli archaeology certainly needs a make-over, but a name change will not achieve very much, or answer the problems listed by Dever. The attempt by some authors in this book to re-badge Biblical (Israeli) Archaeology as part of Levantine Archaeology is problematic. Levantine Archaeology is alive and well, it continued in Syria and Jordan throughout the 20th century only stopping for the World Wars. Most archaeologists in this field will not appreciate the baggage of Israeli biblical archaeology being brought to their doorstep. The hysteria associated with the Tell Mardikh tablets in the late 1970's was the last such encounter. Nor will they appreciate involvement with the politics, factionalism, variable competence and narrow focus of Israeli Iron Age archaeology.

The advanced state of archaeology elsewhere in the Levant is not appreciated by any of the contributors to this book and some, like Dever, actually admit to ignorance about the matter. Levy's excavation in Jordan is repeatedly alluded to while the many other American excavations barely rate a mention. The journal of the British School of Archaeology in Jerusalem (now the Council for British Research in the Levant) began in 1969 and is called 'Levant'. At the 2010 ICAANE conference the second most numerous national group were from Italy, and most of their archaeological work was based in the Levant.

The use of the term 'Biblical Archaeology' in this book confuses the issues discussed. For most Christians, Biblical Archaeology includes the New Testament period and extends across the Mediterranean to Rome. For American academics, Biblical Archaeology is associated with the writings of people like G. Ernest Wright and Paul Lapp; its methodological shortcomings have been thoroughly examined and dealt with. The resurrection of the term here as an alias for Israeli Iron Age archaeology, makes the subject of Israeli archaeology far more difficult to address. Its presence in the book's title may sell a few more volumes, but it will also hasten disillusionment with the issue. Dever expresses the view that 'Biblical Archaeology' is not now a discipline, but a dialogue between archaeology and biblical studies. He is certainly correct.

The titles and positions of the contributors to the book are not mentioned in it; they have been added to this review after a web search. The number of contributors holding chairs endowed by American Jewish interests is noteworthy. How this may play out is unclear, the scholars themselves are all of unquestionable academic integrity, however I detect an ignorance of the issues at the heart of the conflict in many Jewish and Zionist environments outside the Middle East. In such circumstances even-handedness is hard to achieve, as Ilan's paper demonstrates.

Of concern is the fact that some of the book's contributors have opposed the appointment of non-Zionist and/or Palestinian scholars to US academic posts and have been associated with lobby groups, such as Campus Watch, set up to carry out this purpose. The signs are not good, but Levy at least does advocate the need for the archaeology of Israel to become part of the region and the book can be seen in the context of trying to prepare Israeli archaeology for this exposure. The Jordanians allowed Thomas Levy and some Israelis to excavate in the Wadi Faynan, but as Dever observes, the Israelis are not likely to follow suit (352). In Dever's view, archaeology in Jordan is not

politicised, however the continuation of this situation can not be taken for granted.

There are much greater forces at work shaping archaeology in Israel and the role it is allowed to fulfil. Until it breaks out of the politically profiled mould it will not be very welcome elsewhere. It needs to acknowledge its own short comings such as the illegal excavations and on-going looting in the Occupied Territories, especially in Jerusalem, the bulldozing of non-Israelite archaeological strata and its contribution to Israeli myths that have led to and justified the dispossession of the Palestinians. It may also contemplate inviting Palestinian archaeologists to participate in the archaeological excavation of sites with strata deposited during the last two millennia.

Dever notes that German, French and British archaeological institutes in Jerusalem are virtually 'defunct'; in fact their focus is now elsewhere. Dever does not speculate on the reason for this change. There are no doubt a number of reasons, but the fact is that many archaeologists once associated with these Institutes were profoundly uncomfortable with Israeli government policy toward the Palestinians and found work elsewhere more enjoyable. While many countries from time to time have awkwardnesses to be worked around, the state of affairs in Israel has been ongoing for over sixty years. Many scholars now boycott Israeli academics. While Zionists are inclined to trivialise this action, they do so from a position of ignorance and disrespect for those who are making a serious statement about something that deeply troubles them.

Levy argues that Israeli archaeology should reject ideology, but he does not indicate what ideologies he has in mind and if they may include the dogma that underpins the modern state of Israel. What ever the case, until Israeli archaeologists adopt a pragmatic approach of justice for Israel's original inhabitants, genuine inclusiveness will be elusive. Ilan Pappé's book *The Ethnic Cleansing of Palestine* (London and New York: Oneworld, 2006) sets out the Israeli evidence for the events of 1948 and it explains how the landscape changed at that time; it has to be the starting point for any meaningful dialogue between Israeli and non-Israeli archaeologists.

The canvas of archaeology in the Mediterranean and the Middle East is broad and irrespective of its title as Near Eastern, Levantine, Biblical or whatever, it does seem to advance with a reasonable level of inclusiveness. Jordan, Egypt, Syria, Lebanon and Cyprus are all open to competent scholars. Turkey is less so and Iraq since the arrival of the American coalition has been closed. Where Israel is concerned the issues are complicated by its politics. While hostilities with the indigenous population continue and borders remain in dispute it will be difficult for Israel's archaeologists to gain unqualified acceptance. If Israeli archaeologists were able to address some of the problems raised by Dever and deal with the issue of ideology, mentioned but not explored in this book, the situation would be much more open. Indeed archaeology may then actually contribute to peace and security in the region.

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